APPENDIX B: AIR QUALITY

LSA ASSOCIATES AIR QUALITY ANALYSIS

DIESEL EXHAUST PARTICULATE SCREENING RISK ASSESSMENT

AIR QUALITY ANALYSIS

SANTA BARBARA COTTAGE HOSPITAL SEISMIC COMPLIANCE AND MODERNIZATION PLAN

LSA

March 2005

AIR QUALITY ANALYSIS

SANTA BARBARA COTTAGE HOSPITAL SEISMIC COMPLIANCE AND MODERNIZATION PLAN

Submitted to:

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LSA Project No. CSB430

LSA

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TABLE OF CONTENTS

APPENDICES

FIGURES AND TABLES

FIGURES

TABLES

1.0 EXECUTIVE SUMMARY

LSA Associates, Inc. (LSA) was retained to prepare an air quality study for the proposed Santa Barbara Cottage Hospital (SBCH) Modernization and Seismic Compliance Plan located in the City of Santa Barbara in southern Santa Barbara County.

This air quality analysis provides a discussion of the proposed project, the physical setting of the project area, and the regulatory framework for air quality. The analysis provides data on existing air quality, evaluates potential air quality impacts associated with the proposed project, and identifies mitigation measures. Modeled air quality levels are based on vehicle data and project trip generation prepared for this project.

The project includes the following components: demolition of approximately 270,000 square feet of existing hospital structures; construction of approximately 472,450 square feet of new hospital structure housing acute care ambulatory and ancillary support services; construction of a helipad, two parking structures, and a three-structure day-care complex; and the closure of Castillo Street between Pueblo and Junipero Streets.

Historical air quality data show that existing carbon monoxide (CO) levels for the project area and the general vicinity do not exceed either the State or federal ambient air quality standards (AAQS). A CO hot spots analysis was conducted with the CALINE4 model and peak-hour intersection vehicle turn volumes for the baseline and with project scenarios at eleven intersections for the existing (year 2004) and estimated project completion year (2013). The results showed that project-related traffic would not significantly affect local CO levels and that the CO concentrations would stay below the State and federal CO standards. Compliance with Santa Barbara County Air Pollution Control District (SBCAPCD) Rules and Regulations during construction will reduce construction-related air quality impacts from fugitive dust emissions and construction equipment emissions to less than the SBCAPCD criteria pollutant annual thresholds. Long-term operational emissions associated with the proposed project, calculated with the URBEMIS 2002 model, are projected to exceed the SBCAPCD criteria pollutant daily thresholds for reactive organic compounds (ROC) and nitrogen oxide (NO_2).

The zoning surrounding Cottage Hospital is predominantly C-O (Medical Office) with a mixture of R-3 (Multiple-family dwelling), R-1 (Single-family dwelling) and C-2 (General Commercial) zoning adjacent. The City's General Plan designates the area around the hospital (the C-O zone and some R-3 areas adjacent to the C-O zone) as Major Public and Institutional. The proposed project is consistent with the intent of the Land Use Element and with the General Plan Land Use Element map.

The evaluation was prepared in conformance with appropriate standards, utilizing procedures and methodologies in the SBCAPCD's current guidelines, *Guidelines for the Implementation of the California Environmental Quality Act of 1970*, revised November 16, 2000.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The project site is located in the City of Santa Barbara (City) in southern Santa Barbara County. The project involves several individual but adjacent parcels that collectively are defined as the project site. The project site is located several blocks north of Highway 101. Local access to the facility is currently provided from Oak Park Lane and Bath, Pueblo, and Castillo Streets. The project site totals approximately 14.54 acres and is located in the Oak Park neighborhood, generally bounded by Oak Park Lane, Los Olivos Street, Bath Street, and Junipero Street. Figure 1, Project Location, provides regional and local maps depicting the project location. Figure 2, Site Plan, shows the proposed site plan.

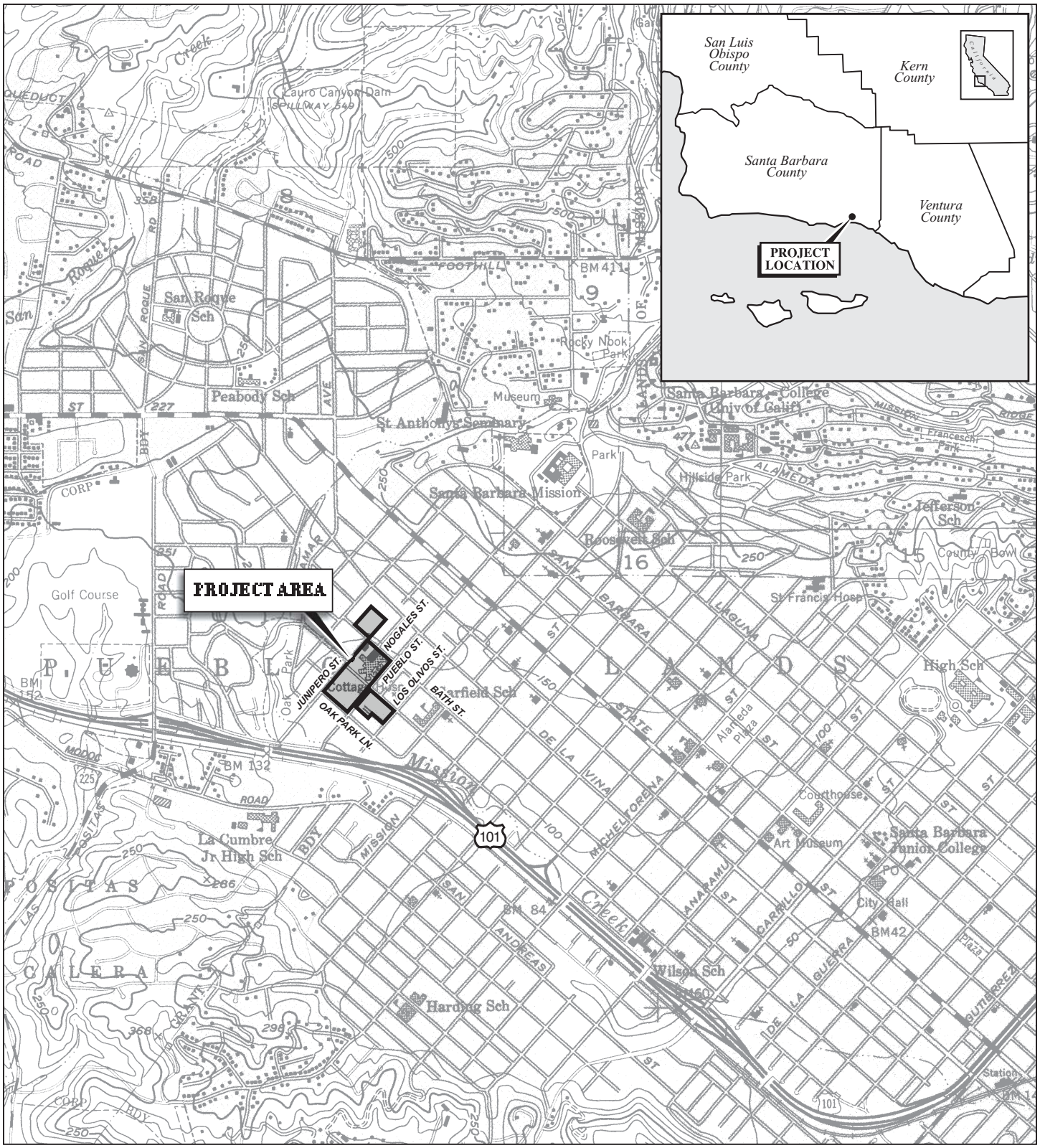
2.2 PROJECT SITE EXISTING SETTING

The existing hospital is located in the Oak Park Neighborhood, an area delineated in the City's General Plan as having a boundary that extends from Mission Creek to the west, Sola Street to the east, State Street to the north, and Highway 101 to the south. The current hospital occupies an entire block and is the dominant use in the area. Supporting hospital facilities exist within several surrounding blocks.

The area immediately surrounding Cottage Hospital is one of the older neighborhoods in Santa Barbara and is characterized by a mix of medical office buildings, single- and multiple-family dwellings, and some commercial uses. The zoning is predominantly C-O (Medical Office) in the blocks immediately surrounding the hospital, with a mixture of R-3 (Multiple-family dwelling), R-1 (Single-family dwelling) and C-2 (General Commercial) zoning adjacent. The City's General Plan designates the area around the hospital (the C-O zone and some R-3 areas adjacent to the C-O zone) as Major Public and Institutional, and the Medical Facilities discussion in the Land Use Element of the General Plan recognizes that "expansion of the medical facilities zone around the Cottage Hospital is in order so that all property within a block of the hospital is included in the medical center" (page 81). The proposed project is consistent with the intent of the Land Use Element and with the General Plan Land Use Element Map.

2.3 PROJECT DESCRIPTION

The Project Applicant, the Santa Barbara Cottage Hospital (SBCH), has submitted an application requesting City approval of the proposed SBCH Modernization and Seismic Compliance Plan (or proposed project). In 1994, the State passed Senate Bill (SB) 1953, intended to ensure that all licensed acute care hospitals are compliant with the Alfred E. Alquist Hospital Facilities Seismic Safety Act (HSSA) by January 1, 2030, in order to be reasonably capable of providing services to the public after a major seismic event. By January 1, 2008, SBCH is required to use all buildings that pose potential



LSA

FIGURE 1

Santa Barbara Cottage Hospital
Seismic Compliance and Modernization Plan
Project Location

SOURCE: USGS 7.5' Quad - Santa Barbara, Ca

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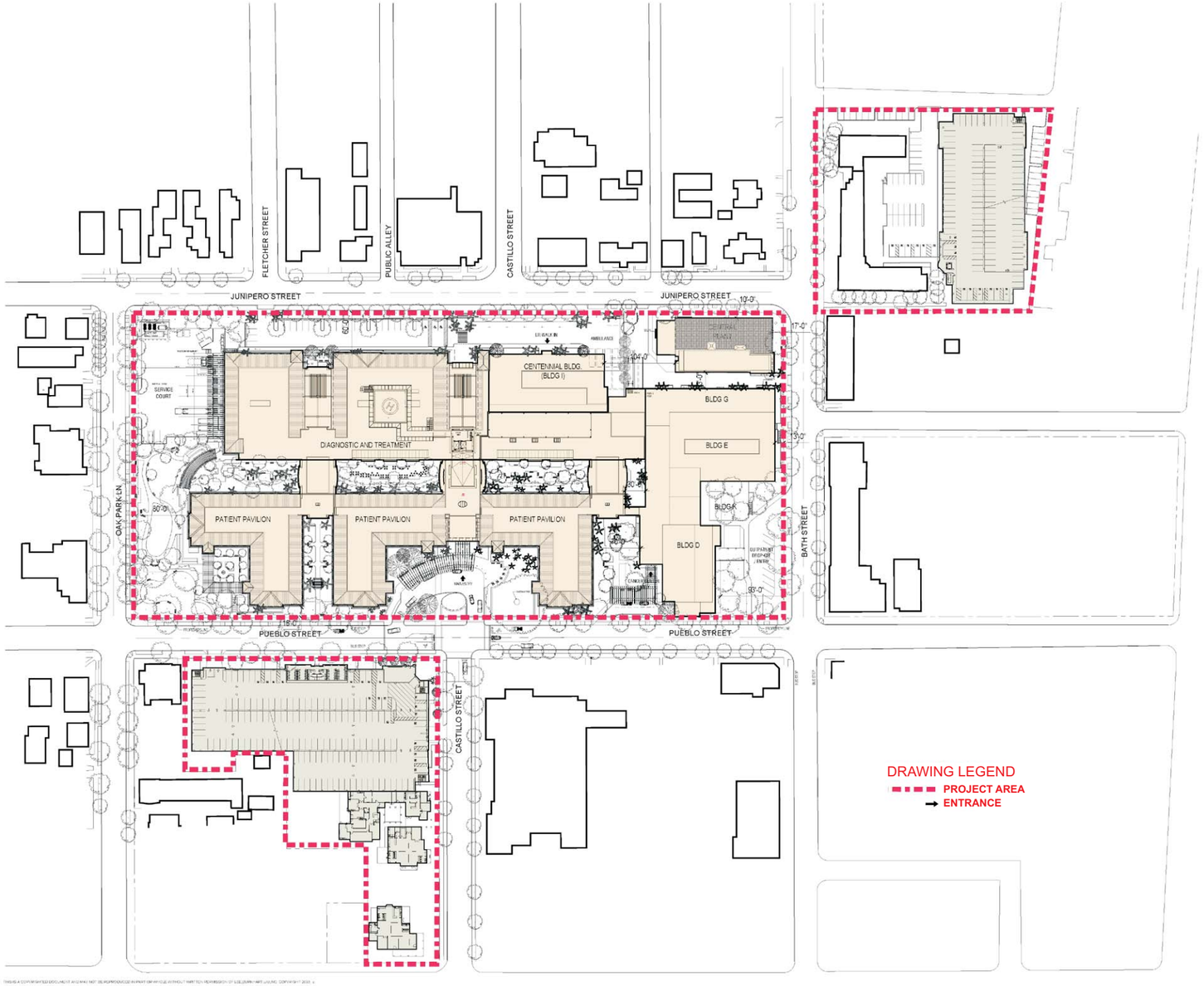

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FIGURE 2

N

0 100 200

SOURCE: Lee, Burkhart, Liu, April 2004

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Santa Barbara Cottage Hospital
Seismic Compliance and Modernization Plan
Proposed Site Plan

risk of collapse for nonacute care only. This deadline can be extended to 2013 if a hospital chooses to comply with the new standards by rebuilding its facility, as is being requested by SBCH. By January 1, 2030, SBCH is required to have all hospital buildings not in substantial compliance with the standards demolished, replaced, or changed to nonhospital use. The proposed project includes the following components: demolition of approximately 270,000 square feet of existing hospital structures; construction of approximately 472,450 square feet of new hospital structure housing acute care ambulatory and ancillary support services; construction of a helipad, two parking structures, and a three-structure day-care complex; and the closure of Castillo Street between Pueblo and Junipero Streets.

3.0 SETTING

3.1 EXISTING ENVIRONMENTAL SETTING

The project site is located within the City of Santa Barbara, which is part of the South Central Coast Air Basin (Basin) and is under the jurisdiction of the Santa Barbara County Air Pollution Control District (SBCAPCD). The air quality assessment for the proposed project includes estimating emissions associated with short-term construction and long-term operation of the proposed project.

3.1.1 Regional Air Quality

Both the State of California (State) and the federal government use six "criteria pollutants" as indicators of air quality and have established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called Ambient Air Quality Standards (AAQS). As shown in Table A, these pollutants include ozone (O_3); carbon monoxide (CO); nitrogen dioxide (NO_2); sulfur dioxide (SO_2); two categories of particulate matter: coarse particulate matter with a diameter of 10 microns or less (PM_{10}) and fine particulate matter less than 2.5 microns in diameter ($PM_{2.5}$); and lead (Pb). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

In addition to setting out primary and secondary AAQS, the State has established a set of episode criteria for O_3, CO, NO_2, SO_2, and PM_{10}. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health. Health effects are progressively more severe as pollutant levels increase from Stage One to Stage Three. Table B lists the health effects of these criteria pollutants and their potential sources. These health effects will not occur unless the standards are exceeded by a large margin or for a prolonged period of time. The State AAQS are more stringent than the federal AAQS.

The California Clean Air Act (CCAA) provides the air districts, such as SBCAPCD, with the authority to manage transportation activities at indirect sources. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. Examples of this would be the motor vehicles at an intersection, a mall, and on highways. The SBCAPCD also regulates stationary sources of pollution throughout its jurisdictional area. Direct emissions from motor vehicles are regulated by the California Air Resources Board (ARB).

Air quality in Santa Barbara County has undergone a gradual improvement over many years, with 1999 being one of the cleanest years on record. The air quality has improved to the point that it is clean enough to meet the federal 1-hour ozone standard for the first time since the standard was instituted. The number of days on which the air was declared unhealthful in Santa Barbara County has

Table A: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1-Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	0.12 ppm (235 µg/m^3)[8]	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	--		0.08 ppm (157 µg/m^3)[8]		
Respirable Particulate Matter (PM_{10})	24-Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		50 µg/m^3		
Fine Particulate Matter ($PM_{2.5}$)	24-Hour	No Separate State Standard		65 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m^3		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		--	--	--
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	--	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.25 ppm (470 µg/m^3)		--		
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	--	Ultraviolet Fluorescence	0.030 ppm (80 µg/m^3)	--	Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	--	
	3-Hour	--		--	0.5 ppm (1300 µg/m^3)	
	1-Hour	0.25 ppm (655 µg/m^3)		--	--	
Lead[9] (Pb)	30 Day Average	1.5 µg/m^3	Atomic Absorption	--	--	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m^3	Same as Primary Standard	
Visibility-Reducing Particles	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		**No Federal Standards**		
Sulfates	24-Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Cloride[9]	24-Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: ARB (July 2003).

Footnotes:

1 California standards for ozone; carbon monoxide (except Lake Tahoe); sulfur dioxide (1 and 24 hour); nitrogen dioxide; suspended particulate matter, PM_{10}; and visibility reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25˚C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25˚C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4 Any equivalent procedure that can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7 Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.

8 New federal eight-hour ozone and fine particulate matter standards were promulgated by U.S. EPA on July 18, 1997. Contact U.S. EPA for further clarification and current federal policies.

9 The ARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Table B: Summary of Health Effects of the Major Criteria Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in the presence of sunlight.	Aggravation of respiratory and cardiovascular diseases. Irritation of eyes. Impairment of cardiopulmonary function. Plant leaf injury.
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust. High temperature stationary combustion. Atmospheric reactions.	Aggravation of respiratory illness. Reduced visibility. Reduced plant growth. Formation of acid rain.
Carbon Monoxide (CO)	Byproducts from incomplete combustion of fuels and other carbon containing substances, such as motor exhaust. Natural events, such as decomposition of organic matter.	Reduced tolerance for exercise. Impairment of mental function. Impairment of fetal development. Death at high levels of exposure. Aggravation of some heart diseases (angina).
Suspended Particulate Matter ($PM_{2.5}$ and PM_{10})	Stationary combustion of solid fuels. Construction activities. Industrial processes. Atmospheric chemical reactions.	Reduced lung function. Aggravation of the effects of gaseous pollutants. Aggravation of respiratory and cardiorespiratory diseases. Increased cough and chest discomfort. Soiling. Reduced visibility.
Sulfur Dioxide (SO_2)	Combustion of sulfur-containing fossil fuels. Smelting of sulfur-bearing metal ores. Industrial processes.	Aggravation of respiratory diseases (asthma, emphysema). Reduced lung function. Irritation of eyes. Reduced visibility. Plant injury. Deterioration of metals, textiles, leather, finishes, coatings, etc.
Lead (Pb)	Contaminated soil (e.g., from leaded fuels and lead based paints).	Impairment of blood function and nerve construction. Behavioral and hearing problems in children.

Source: ARB 2001.

been reduced by over 80 percent from 1990 to 2000 despite substantial increases in population and vehicle miles traveled.

Climate/Meteorology. Air quality in the planning area is not only affected by various emission sources (mobile, industry, etc.) but also affected by atmospheric conditions such as wind speed, wind direction, temperature, rainfall, etc. The climate of Santa Barbara County can be characterized as Mediterranean, with warm, dry summers and cooler, damp winters. Along the coast, mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a wider range of temperature conditions.

The climatological station closest to the site is the Santa Barbara Station.[1] The monthly average maximum temperature recorded at this station from December 1927 to December 2003 ranged from 65.2°F in January to 77.5°F in August, with an annual average maximum of 71.1°F. The monthly average minimum temperature recorded at this station ranged from 42.6°F in January to 58.2°F in August, with an annual average minimum of 50.3°F. January is typically the coldest month, and August is typically the warmest month in this area of the Basin.

Regional meteorology is largely dominated by a persistent high pressure area that commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific High remains generally fixed several hundred miles offshore from May through September, enhancing onshore winds and opposing offshore winds. During spring and early summer, as onshore breezes pass over the cool water of the ocean, fog and low clouds often form in the marine air layer along the coast. Surface heating in the interior valleys dissipates the marine layer as it moves inland.

From November through April, the Pacific High tends to migrate south, allowing northern storms to move across the county. About 90 percent of the total annual rainfall is received during this period. Winter conditions are usually mild, with intermittent periods of precipitation followed by mostly clear days. Rainfall amounts can vary considerably around the county. In the coastal plain, annual rainfall varies from 41 to 71 cm (16 to 28 inches), while the Upper Salinas River Valley generally receives 30 to 51 cm (12 to 20 inches). The Carrizo Plain is the driest area of the county, with less than 30 cm (12 inches) of rain in a typical year. The Santa Barbara Station climatological station monitored precipitation from December 1927 to December 2003. Average monthly rainfall measured in Santa Barbara during that period varied from 4.04 inches in February to 0.47 inch or less between May and October, with an annual total of 17.62 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

Airflow around the county plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific high pressure system and other global patterns, by topographical factors, and by circulation patterns resulting from temperature differences between the land and sea. In spring and summer, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during

[1] Western Regional Climate Center, http://www.wrcc.dri.edu/climsum.html

the day. At night, as the sea breeze dies, weak drainage winds flow down the coastal mountains and valleys to form a light, easterly land breeze.

In the fall, onshore surface winds decline and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This, along with the diurnal alternation of land-sea breeze circulation, can sometimes produce a "sloshing" effect. Under these conditions, pollutants may accumulate over the ocean for a period of one or more days and are subsequently carried back onshore with the return of the sea breeze. Strong inversions can form at this time, trapping pollutants near the surface.

This effect is intensified when the Pacific High weakens or moves inland. This may produce a "Santa Ana" condition in which air, often pollutant-laden, is transported into the county from the east and southeast. This can occur over a period of several days until the high pressure system returns to its normal location, breaking the pattern. The breakup of a Santa Ana condition may result in relatively stagnant conditions and a buildup of pollutants offshore. The onset of the typical daytime seabreeze can bring these pollutants back onshore, where they combine with local emissions to cause high pollutant concentrations. Not all occurrences of the post-Santa Ana condition lead to high ambient pollutant levels, but it does play an important role in the air pollution meteorology of the county.

Air Pollution Constituents and Attainment Status. The ARB coordinates and oversees both State and federal air pollution control programs in California. The ARB oversees activities of local air quality management agencies and maintains air quality monitoring stations throughout the State in conjunction with the Environmental Protection Agency (EPA) and local air districts. The ARB has divided the State into 15 air basins based on meteorological and topographical factors of air pollution. Data collected at these stations are used by the ARB and EPA to classify air basins as attainment, nonattainment, nonattainment-transitional, or unclassified, for each criteria pollutant based on air quality data for the most recent three calendar years compared with the AAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA. The air quality data are also used to monitor progress in attaining air quality standards.

ARB provided the EPA with California's recommendations for eight-hour ozone area designations on July 15, 2003. The recommendations and supporting data were an update to a report submitted to the EPA in July 2000. As of August 8, 2003, Santa Barbara County has been redesignated as a federal ozone attainment area for the one-hour ozone NAAQS. On December 3, 2003, the EPA published its other proposed designations. The EPA's proposal differs from the State's recommendations, primarily on the appropriate boundaries for several nonattainment areas. ARB responded to the EPA's proposal on February 4, 2004. The EPA issued final designations on April 15, 2004. Table C lists the attainment status for the criteria pollutants in the Basin.

Table C: Attainment Status of Criteria Pollutants in the South Central Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Nonattainment-Moderate	Attainment
O_3 8-hour	Not Applicable (No State Standard)	Attainment
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Not Applicable (No State Standard)	Attainment/Unclassified
CO	Attainment	Attainment/Unclassified
NO_2	Attainment	Attainment/Unclassified
SO_2	Attainment	Unclassified
Lead	Attainment	Not Applicable
All others	Attainment/Unclassified	Not Applicable

Source: ARB (www.arb.ca.gov/desig/desig.htm), 2004.

Ozone. O_3 (smog) is formed by photochemical reactions between NO_X and reactive organic gases (ROG) rather than being directly emitted. O_3 is a pungent, colorless gas typical of Southern California smog. Elevated O_3 concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, the elderly, and young children. O_3 levels peak during summer and early fall. Santa Barbara County is designated as a nonattainment area for the State one-hour O_3 standard and in attainment for the federal one-hour and eight-hour O_3 standards.

Carbon Monoxide. CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. The entire Basin is designated as in attainment with both federal and State CO standards.

Nitrogen Oxides. NO_2, a reddish brown gas, and nitric oxide (NO), a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are referred to as nitrogen oxides, or NO_X. NO_X is a primary component of the photochemical smog reaction. It also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition (i.e., acid rain). NO_2 decreases lung function and may reduce resistance to infection. The entire Basin is designated as in attainment with both federal and State NO_2 standards.

Sulfur Dioxide. SO_2 is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight. The entire Basin is designated as in attainment or unclassified with both federal and State SO_2 standards.

Lead. Lead is found in old paints and coatings, plumbing, and a variety of other materials. Once in the blood stream, lead can cause damage to the brain, nervous system, and other body systems. Children are highly susceptible to the effects of lead. The entire Basin is designated as in attainment for the State standard for lead.

Particulate Matter. Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles, PM_{10}, derive from a variety of sources, including windblown dust and grinding operations. Fuel combustion and resultant exhaust from power plants and diesel buses and trucks are primarily responsible for fine particle, $PM_{2.5}$, levels. Fine particles can also be formed in the atmosphere through chemical reactions. PM_{10} can accumulate in the respiratory system and aggravate health problems such as asthma. The EPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to the health effects listed in a number of recently published community epidemiological studies at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms. The entire Basin is designated as unclassified for the federal PM_{10} standard, attainment for federal $PM_{2.5}$ standard, and nonattainment for the State PM_{10} standard.

3.2 LOCAL AIR QUALITY

The SBCAPCD, together with the ARB, maintains ambient air quality monitoring stations in the Basin. The air quality trends measured at air quality monitoring stations in the vicinity of the project are the best representation of the ambient air quality at the project. No single station in the project vicinity monitors all pollutants. Data from the Santa Barbara-Canon Perdido station (1.8 miles from the project), the Goleta-Fairview station (8 miles from the project), the Los Flores Canyon #1 station (18 miles from the project), and the Santa Maria-Broadway station (55 miles from the project) were compiled to show representative levels of the criteria pollutants. The ambient air quality data in Table D shows that in the vicinity of the project, all criteria pollutant levels are below the relevant State and federal standards.

3.3 REGULATORY SETTINGS

3.3.1 Federal Regulations/Standards

Pursuant to the federal Clean Air Act (CAA) of 1970, the EPA established national ambient air quality standards (NAAQS). The NAAQS were established for the six major pollutants described above in Section 3.1, termed "criteria" pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established AAQS, or criteria, for outdoor concentrations in order to protect public health. These standards are listed in Table A.

Table D: Ambient Air Quality at Air Monitoring Stations in the Project Vicinity

Pollutant / Standard	2003	2002	2001
Carbon Monoxide (2003 data from Santa Barbara-Canon Perdido, earlier from Goleta-Fairview)			
Maximum 1-hr concentration (ppm)	5.9	2.8	3.5
Number of days exceeded: State: > 20 ppm	0	0	0
Federal: > 35 ppm	0	0	0
Maximum 8-hr concentration (ppm)	2.3	1.1	1.9
Number of days exceeded: State: ≥ 9.0 ppm	0	0	0
Federal: ≥ 9 ppm	0	0	0
Ozone (2002 & 2003 data from Santa Barbara-Canon Perdido, earlier from Goleta-Fairview)			
Maximum 1-hr concentration (ppm)	0.079	0.076	0.082
Number of days exceeded: State: > 0.09 ppm	0	0	0
Federal: > 0.12 ppm	0	0	0
Maximum 8-hr concentration (ppm)	0.070	0.061	0.066
Number of days exceeded: Federal: > 0.08 ppm	0	0	0
Coarse Particulates (PM_{10}) (from Las Flores Canyon #1 station)			
Maximum 24-hr concentration ($\mu g/m^3$)	34.0	32.6	34.0
Number of days exceeded: State: > 50 $\mu g/m^3$	0	0	0
Federal: > 150 $\mu g/m^3$	0	0	0
Annual arithmetic average concentration ($\mu g/m^3$)	15	15	15
Exceeded for the year: State: > 20 $\mu g/m^3$	No	No	No
Federal: > 50 $\mu g/m^3$	No	No	No
Fine Particulates ($PM_{2.5}$) (2003 data from Santa Barbara-Canon Perdido station, 2002-1999 from Santa Maria-Broadway station)			
Maximum 24-hr concentration ($\mu g/m^3$)	24.0	21.3	43.2
Number of days exceeded: Federal: > 65 $\mu g/m^3$	0	0	0
Annual arithmetic average concentration ($\mu g/m^3$)	8.6	9.5	10.4
Exceeded for the year: State: > 12 $\mu g/m^3$	No	No	No
Federal: > 15 $\mu g/m^3$	No	No	No
Nitrogen Dioxide (from Goleta-Fairview station)			
Maximum 1-hr concentration (ppm)	0.051	0.063	0.054
Number of days exceeded: State: > 0.25 ppm	0	0	0
Annual arithmetic average concentration (ppm)	0.011	0.011	0.010
Exceeded for the year: Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (from Goleta-Fairview station)			
Maximum 1-hr concentration (ppm)	0.005	0.006	0.010
Number of days exceeded: State: > 0.25 ppm	0	0	0
Maximum 3-hr concentration (ppm)	0.004	0.003	0.005
Number of days exceeded: Federal: > 0.5 ppm	0	0	0
Maximum 24-hr concentration (ppm)	0.003	0.001	0.002
Number of days exceeded: State: > 0.04 ppm	0	0	0
Federal: > 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)	0.001	0.001	0.001
Exceeded for the year: Federal: > 0.030 ppm	No	No	No

Source: EPA and ARB 2001 to 2003
ppm = parts per million
$\mu g/m^3$ = microgram of pollutant per cubic meter of air

The EPA established new national air quality standards for ground-level O_3 and $PM_{2.5}$ matter in 1997. On May 14, 1999, the Court of Appeals for the District of Columbia Circuit issued a decision ruling that the CAA, as applied in setting the new public health standards for O_3 and particulate matter, was unconstitutional as an improper delegation of legislative authority to the EPA. On February 27, 2001, the U.S. Supreme Court upheld the way the government sets air quality standards under the CAA. The court unanimously rejected industry arguments that the EPA must consider financial costs as well as health benefits in writing standards. The justices also rejected arguments that the EPA took too much lawmaking power from Congress when it set tougher standards for O_3 and soot in 1997. Nevertheless, the court threw out the EPA's policy for implementing new O_3 rules, saying that the agency ignored a section of the law that restricts its authority to enforce such rules.

In April 2003, the EPA was cleared by the White House Office of Management and Budget (OMB) to implement the eight-hour ground-level O_3 standard. The EPA issued the proposed rule implementing the eight-hour O_3 standard in April 2003. The EPA completed final eight-hour nonattainment status on April 15, 2004. The eight-hour O_3 implementation rule revokes the one-hour standard in April 2005. This will change the attainment status in some areas: however, it does not change any commitments each area made for attaining the one-hour standard.

The EPA plans to issue the final $PM_{2.5}$ implementation rule in the fall of 2004. The EPA is then expected to make final designations on December 15, 2004.

3.3.2 State Regulations/Standards

The State began to set California ambient air quality standards (CAAQS) in 1969 under the mandate of the Mulford-Carrell Act. The CAAQS are generally more stringent than the NAAQS. In addition to the six criteria pollutants covered by the NAAQS, there are CAAQS for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are also listed in Table A.

Originally, there were no attainment deadlines for CAAQS; however, the CCAA of 1988 provided a time frame and a planning structure to promote their attainment. The CCAA required nonattainment areas in the State to prepare attainment plans and proposed to classify each such area on the basis of the submitted plan, as follows: moderate, if CAAQS attainment could not occur before December 31, 1994; serious, if CAAQS attainment could not occur before December 31, 1997; and severe, if CAAQS attainment could not be conclusively demonstrated at all. The attainment plans are required to achieve a minimum 5 percent annual reduction in the emissions of nonattainment pollutants unless all feasible measures have been implemented.

The EPA has designated the Santa Barbara County Association of Governments (SBCAG) as the Metropolitan Planning Organization (MPO) responsible for ensuring compliance with the requirements of the CAA for the Basin.

3.4 REGIONAL AIR QUALITY PLANNING FRAMEWORK

The 1976 Lewis Air Quality Management Act established the SBCAPCD and other air districts throughout the State. The federal CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in

nonattainment areas of the state. The California Clean Air Act (CCAA), adopted in 1988, requires that all Air Pollution Control Districts (APCDs) and Air Quality Management Districts (AQMDs) adopt and enforce regulations to achieve and maintain the State ambient air quality standards for the area under its jurisdiction. The CCAA requires non-attainment districts to develop and adopt an Air Quality Management Plan (AQMP) or Clean Air Plan (CAP). The AQMP/CAP must include emission reduction strategies and control measures sufficient to demonstrate that California air quality standards will be attained by the "earliest practicable date." As a demonstration of progress toward attainment, the CCAA requires that emissions of non-attainment pollutants be reduced by at least five percent per year (compared to 1987 emission levels) until the standards are achieved. The Act identifies transportation control measures as an essential element of the attainment plan.

The ARB coordinates and oversees both State and federal air pollution control programs in California. The ARB oversees activities of local air quality management agencies and is responsible for incorporating air quality management plans for local air basins into a State Implementation Plan (SIP) for EPA approval. The ARB has divided the State into 15 air basins. Significant authority for air quality control within them has been given to local air districts that regulate stationary source emissions and develop local nonattainment plans.

Regional Air Quality Management Plan. The SBCAPCD and the SBCAG are responsible for formulating and implementing the CAP for the Basin. Every three years the SBCAPCD prepares a new CAP, updating the previous plan and having a twenty-year horizon. Compliance with the provisions of the CAA and the CCAA is the primary focus of the CAP developed by the SBCAPCD and the SBCAG.

The 2001 Plan was prepared to formally request EPA to redesignate Santa Barbara County as an attainment area for the federal 1-hour ozone standard. As of August 8, 2003, the EPA approved this redesignation. The EPA also approved the one-hour ozone maintenance plan and motor vehicle emissions budgets in the 2001 CAP as revisions to the Santa Barbara portion of the SIP. The County continues to violate the State one-hour standard for ozone and the State standard for PM_{10}.

To coordinate all applicable state and federal planning requirements, the 2001 Plan integrates the technical and policy issues associated with both the State and federal 1-hour ozone standards. The 2001 Plan satisfies both State and federal planning requirements.

The Final 2001 Clean Air Plan was adopted by the Air Pollution Control District Board of Directors on November 15, 2001.

4.0 METHODOLOGY

A number of modeling tools are available to assess air quality impacts of projects. In addition, certain air districts, such as the SBCAPCD, have created guidelines and requirements to conduct air quality analyses. SBCAPCD's current guidelines, *Guidelines for the Implementation of the California Environmental Quality Act of 1970* (revised November 16, 2000), were adhered to in the assessment of air quality impacts for the proposed project.

The air quality assessment includes estimating emissions associated with short-term construction and long-term operation of the proposed project. Criteria pollutants with regional impacts would be emitted by project-related vehicular trips, as well as by emissions associated with stationary sources used on site. Localized air quality impacts (i.e., higher CO concentrations [CO hot spots] near intersections or roadway segments in the project vicinity), would be small and less than significant due to the generally low ambient CO concentrations in the project area. A local CO hot spot analysis was conducted. Project-specific information was used in the modeling. Default values representative of the proposed project were used when project-specific data were not available. A qualitative diesel toxics analysis was performed to predict the impacts from the exhaust of diesel-powered equipment used in the project's construction and operation.

The net increase in pollutant emissions determines the significance and impact on regional air quality as a result of the proposed project. The results also allow the local government to determine whether the proposed project will deter the region from achieving the goal of reducing pollutants in accordance with the CAP in order to comply with federal and State AAQS.

4.1 THRESHOLD OF SIGNIFICANCE

A project would normally be considered to have a significant effect on air quality if the project would violate any AAQS, contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutants concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

In addition to the federal and State AAQS, there are daily emissions thresholds for construction and operation of a proposed project in the Basin. The City of Santa Barbara uses the SBCAPCD thresholds of significance as described in the SBCAPCD *Guidelines for the Implementation of the California Environmental Quality Act of 1970* (SBCAPCD, November 2000) and are used in this analysis.

4.1.1 Thresholds For Construction Emissions

SBCAPCD Rule 202.F.3 specifies that if the combined emissions from all construction equipment used have the potential to emit more than 25 tons per year of ROC, NO_X, SO_X, and PM_{10}, offsets shall be provided under the provisions of Rule 804.

SBCAPCD Rule 302 requires that fugitive dust be controlled so that the presence of such dust is not darker than No. 1 on the Ringlemann Chart (as published by the United States Bureau of Mines). In addition, SBCAPCD Rule 303 requires implementation of techniques to prevent fugitive dust from creating a nuisance.

4.1.2 Thresholds for Operational Emissions

The daily operational emissions "significance" thresholds for the Basin are as follows.

Emission Thresholds for Pollutants with Regional Effects. Projects with operation-related emissions that exceed any of the emission thresholds listed below are considered significant under the SBCAPCD guidelines.

- 240 pounds per day of ROC from all project sources (both stationary and mobile)
- 25 pounds per day of ROC from motor vehicle trips only
- 240 pounds per day of NO_X from all project sources (both stationary and mobile)
- 25 pounds per day of NO_X from motor vehicle trips only
- 80 pounds per day of PM_{10} from all project sources (both stationary and mobile)

For CO, the significance threshold may be triggered if the project contributes more than 800 peak hour trips to an individual intersection. Local CO hot spot analysis will need to be conducted (see below) to determine whether an impact would occur. Additionally, the project must not cause or contribute to a violation of any CAAQS or NAAQS (except ozone); and not exceed the SBCAPCD health risks public notification thresholds adopted by the SBCAPCD Board. The project must be consistent with the adopted federal and state air quality management plans for Santa Barbara.

Local Microscale Concentration Standards. The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. The following are applicable local emission concentration standards for CO:

- California State one-hour CO standard of 20.0 ppm
- California State eight-hour CO standard of 9.0 ppm

5.0 IMPACTS

5.1 LESS THAN SIGNIFICANT IMPACTS

5.1.1 Long-Term Microscale (CO Hot Spot) Analysis

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality effects would occur when emissions from vehicular traffic increase in local areas as a result of the proposed project. The primary mobile source pollutant of local concern is CO, which is a direct function of vehicle idling time and, thus, traffic flow conditions. CO transport is extremely limited; it disperses rapidly with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations proximate to a congested roadway or intersection may reach unhealthful levels affecting local sensitive receptors (residents, school children, the elderly, hospital patients, etc). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentration, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Santa Barbara station, the closest station with monitored CO data, showed a highest recorded one-hour concentration of 5.9 ppm (State standard is 20 ppm) and a highest eight-hour concentration of 2.3 ppm (State standard is 9 ppm) during the past three years (see Table D).

The highest CO concentrations would occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Based on the traffic study (LSA, July 2004), CO hot spot analyses were conducted for existing and future cumulative conditions. The impact on local carbon monoxide levels was assessed with the ARB-approved CALINE4 air quality model, which allows microscale CO concentrations to be estimated along roadway corridors or near intersections. This model is designed to identify localized concentrations of carbon monoxide, often termed "hot spots." A brief discussion of input to the CALINE4 model follows. The analysis was performed for the worst-case wind angle and wind speed condition and is based upon the following assumptions:

- Selected modeling locations represent the intersections closest to the project site, with the highest project-related vehicle turning movements and the worst level of service deterioration;
- Twenty receptor locations with the possibility of extended outdoor exposure from 8–14 meters (approximately 24–46 feet) of the roadway centerline near intersections were modeled to determine carbon monoxide concentrations;
- The following model input parameters were used as specified in the SBCAPCD *Scope and Content of Air Quality Sections in Environmental Documents* (June 2004): run type of "Worst

Case," wind speed of 0.5 meter/second, Class of G, Mixing Height of 1,000 meters, Surface Roughness of 0 (a suburban topographical condition between the source and receptor), and Temperature of 10 ºC, representing a worst-case scenario for CO concentrations;

- CO concentrations are calculated for the one-hour averaging period and then compared to the one-hour standards. CO eight-hour averages are extrapolated using techniques outlined in the SBCAPCD *Scope and Content of Air Quality Sections in Environmental Documents* (June 2004), and compared to the eight-hour standards; a persistence factor of 0.7 was used;
- Concentrations are given in ppm at each of the receptor locations;
- The "at-grade" link option with speed adjusted based on average cruise speed and number of vehicles per lane per hour was used rather than the "intersection" link selection in the CALINE4 model. (Caltrans has suggested that the "intersection" link should not be used due to an inappropriate algorithm based on outdated vehicle distribution.) Emission factors from the EMFAC2002 model for all vehicles based on the adjusted speed for the years 2004 and 2013 were used for the vehicle fleet; and
- The highest one-hour and eight-hour CO concentrations monitored at the Santa Barbara station in the past three years were used as background concentrations: 5.9 ppm for the one-hour CO and 2.3 ppm for the eight-hour CO. The "background" concentrations are then added to the model results for future with and without the proposed project conditions.

The proposed project would contribute to increased CO concentrations at intersections in the project vicinity. As shown in Table E, under the existing conditions, all eleven intersections analyzed would have one-hour and eight-hour CO concentrations below the federal and State standards. The existing CO concentrations are from current traffic in the vicinity of these intersections.

One future year scenario was evaluated for traffic impacts from the proposed project: the project completion year (estimated in 2013). For this scenario, traffic volumes with and without the project projected for year 2013 were used, and vehicle emission factors for CO for the year 2013 were used in CALINE4. The current year (2004) background CO concentrations were added to the predicted CO concentrations. Table F shows that, in the year 2013 completion year scenario, none of the eleven intersections analyzed would exceed either the one-hour or the eight-hour CO concentration federal and State standards. The lower overall CO concentrations, even though higher traffic volumes are anticipated, are generally due to lower future vehicular emissions from advanced technology and lower ambient CO levels in the future. The proposed project would contribute at most a 0.1 ppm increase to the one-hour and eight-hour CO concentrations at these intersections. The proposed project would not have a significant impact on local air quality for CO, and no mitigation measures would be required.

5.1.2 Construction Impacts

Air quality impacts would occur during construction of the proposed project from soil disturbance and equipment exhaust. Major sources of emissions during demolition, grading, and site preparation include: (1) exhaust emissions from construction vehicles; (2) equipment and fugitive dust generated by construction vehicles and equipment traveling over exposed surfaces; (3) demolition activities; and (4) soil disturbances from grading and backfilling.

Table E: Existing (2004) CO Concentrations[1]

Intersection	Receptor Distance to Road Centerline (Meters)	Existing One-Hour CO Concentration (ppm)	Existing Eight-Hour CO Concentration (ppm)	Exceeds State Standards	
				1-Hr	8-Hr
Junipero St. & Bath St.	8	6.4	2.7	No	No
	8	6.4	2.7	No	No
	8	6.4	2.7	No	No
	8	6.4	2.7	No	No
Junipero St. & Castillo St.	8	6.4	2.7	No	No
	8	6.3	2.6	No	No
	8	6.3	2.6	No	No
	8	6.3	2.6	No	No
Junipero St. & Oak Park Ln.	8	6.3	2.6	No	No
	8	6.3	2.6	No	No
	8	6.3	2.6	No	No
	8	6.3	2.6	No	No
Nogales Ave. & De La Vina St.	10	6.8	2.9	No	No
	10	6.7	2.9	No	No
	10	6.7	2.9	No	No
	10	6.7	2.9	No	No
Pueblo St. & De La Vina St.	8	6.8	2.9	No	No
	8	6.8	2.9	No	No
	8	6.8	2.9	No	No
	8	6.8	2.9	No	No
Pueblo St. & Bath St.	8	6.5	2.7	No	No
	8	6.5	2.7	No	No
	8	6.5	2.7	No	No
	8	6.4	2.7	No	No
Pueblo St. & Castillo St.	8	6.5	2.7	No	No
	8	6.5	2.7	No	No
	8	6.5	2.7	No	No
	8	6.5	2.7	No	No
Pueblo St. & Oak Park Ln.	8	6.4	2.7	No	No
	8	6.4	2.7	No	No
	8	6.4	2.7	No	No
	8	6.4	2.7	No	No
Mission St. & De La Vina St.	10	7.8	3.6	No	No
	10	7.8	3.6	No	No
	10	7.7	3.6	No	No
	10	7.6	3.5	No	No
Mission St. & Bath St.	14	8.0	3.8	No	No
	14	8.0	3.8	No	No
	12	7.9	3.7	No	No
	10	7.9	3.7	No	No
Mission St. & Castillo St.	10	8.4	4.1	No	No
	8	8.3	4.0	No	No
	8	8.3	4.0	No	No
	8	8.2	3.9	No	No

Source: LSA Associates, Inc., June, 2004.

[1] Includes ambient one-hour concentration of 5.9 ppm and ambient 8-hour concentration of 2.3 ppm. Measured at the 700 E. Canon Perdido, Santa Barbara, CA, AQ Station (Santa Barbara County).

Table F: Completion Year (2013) CO Concentrations[2]

Intersection	Receptor Distance to Road Centerline (Meters)	Project Related Increase 1-hr/8-hr (ppm)	Without/With Project One-Hour CO Concentration (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Exceeds State Standards	
					1-Hr	8-Hr
Junipero St. & Bath St.	8 / 8	0.1 / 0.1	6.2 / 6.3	2.5 / 2.6	No	No
	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
Junipero St. & Castillo St.	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
Junipero St. & Oak Park Ln.	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
Nogales Ave. & De La Vina St.	10 / 10	0.0 / 0.0	6.3 / 6.3	2.6 / 2.6	No	No
	10 / 10	0.0 / 0.0	6.3 / 6.3	2.6 / 2.6	No	No
	10 / 10	0.0 / 0.0	6.3 / 6.3	2.6 / 2.6	No	No
	10 / 10	0.0 / 0.0	6.3 / 6.3	2.6 / 2.6	No	No
Pueblo St. & De La Vina St.	8 / 8	0.0 / 0.0	6.4 / 6.4	2.7 / 2.7	No	No
	8 / 8	0.0 / 0.0	6.4 / 6.4	2.7 / 2.7	No	No
	8 / 8	0.0 / 0.0	6.4 / 6.4	2.7 / 2.7	No	No
	8 / 8	0.0 / 0.0	6.4 / 6.4	2.7 / 2.7	No	No
Pueblo St. & Bath St.	8 / 8	0.1 / 0.1	6.2 / 6.3	2.5 / 2.6	No	No
	8 / 8	0.1 / 0.1	6.2 / 6.3	2.5 / 2.6	No	No
	8 / 8	0.1 / 0.1	6.2 / 6.3	2.5 / 2.6	No	No
	8 / 8	0.1 / 0.1	6.2 / 6.3	2.5 / 2.6	No	No
Pueblo St. & Castillo St.	8 / 8	0.1 / 0.1	6.2 / 6.3	2.5 / 2.6	No	No
	8 / 8	0.0 / 0.0	6.2 / 6.2	2.5 / 2.5	No	No
	8 / 8	0.0 / 0.0	6.2 / 6.2	2.5 / 2.5	No	No
	8 / 8	0.0 / 0.0	6.2 / 6.2	2.5 / 2.5	No	No
Pueblo St. & Oak Park Ln.	8 / 8	0.0 / 0.0	6.2 / 6.2	2.5 / 2.5	No	No
	8 / 8	0.0 / 0.0	6.2 / 6.2	2.5 / 2.5	No	No
	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
	8 / 8	0.1 / 0.1	6.1 / 6.2	2.4 / 2.5	No	No
Mission St. & De La Vina St.	10 / 10	0.0 / 0.0	7.0 / 7.0	3.1 / 3.1	No	No
	10 / 10	0.0 / 0.0	7.0 / 7.0	3.1 / 3.1	No	No
	10 / 10	0.0 / 0.0	6.9 / 6.9	3.0 / 3.0	No	No
	10 / 10	0.0 / 0.0	6.9 / 6.9	3.0 / 3.0	No	No
Mission St. & Bath St.	14 / 14	0.0 / 0.0	7.1 / 7.1	3.1 / 3.1	No	No
	12 / 12	0.0 / 0.0	7.1 / 7.1	3.1 / 3.1	No	No
	12 / 12	0.0 / 0.0	7.0 / 7.0	3.1 / 3.1	No	No
	10 / 10	0.0 / 0.0	7.0 / 7.0	3.1 / 3.1	No	No
Mission St. & Castillo St.	10 / 10	0.0 / 0.0	7.3 / 7.3	3.3 / 3.3	No	No
	8 / 10	0.1 / 0.1	7.2 / 7.3	3.2 / 3.3	No	No
	8 / 8	0.0 / 0.0	7.2 / 7.2	3.2 / 3.2	No	No
	8 / 8	0.0 / 0.0	7.2 / 7.2	3.2 / 3.2	No	No

Source: LSA Associates, Inc., June, 2004.

[2] Includes ambient one-hour concentration of 5.9 ppm and ambient 8-hour concentration of 2.3 ppm. Measured at the 700 E. Canon Perdido, Santa Barbara, CA, AQ Station (Santa Barbara County).

Due to the comprehensive nature of the project, demolition, reconstruction, and remodeling will be implemented in a series of phases over an approximate ten-year period through the year 2013. The hospital will remain operational during the entire construction duration in order to maintain existing hospital services and minimize disruption to patient care.

Over the course of the entire construction period, the proposed project includes the demolition of 270,705 square feet, including 233,170 square feet of the existing main hospital building and Eye Center and 37,535 square feet of structures located on the adjacent block bounded by Oak Park Lane and Junipero, Castillo, and Pueblo Streets. Preliminary earthwork quantities for the proposed project are 143,600 cubic yards (cy) cut and 60,500 cy fill. SBCAPCD requires that an "Asbestos Demolition and Renovation Compliance Checklist" be completed before any demolition and the SBCAPCD notified.

URBEMIS 2002, issued by the ARB, was used to model emissions from these construction activities. This model includes both exhaust and fugitive emissions from the entire construction process. It includes emissions from not only the major activities of demolition, grading and construction, but also worker commuting, architectural coatings, etc. Note that the plan to provide off-site parking for construction workers, with a shuttle bus provided to transport workers, will reduce these emissions below the levels shown in Table G, which lists the resulting emissions associated with construction activities for the proposed project by year. Construction-related emissions during any year are shown not to exceed annual thresholds for any criteria pollutant. The proposed project would not have a significant impact on local air quality for CO, and no mitigation measures would be required.

Table G: Emissions from Construction Operations

Year	Phase	Months of Activity		Pollutants (tons/year)			
		Demolition	Grading & Construction	ROC	NO_X	SO_X	PM_{10}
2005	1A, 1B, 2A, 2B, 3	11	11	1.9	14	0.0	0.7
2006	2A, 2B, 3, 4	12	12	1.9	14	0.0	0.6
2007	2A, 4	4	12	1.9	13	0.0	0.6
2008	4	4	12	1.9	13	0.0	0.6
2009	4	4	12	1.9	12	0.0	0.5
2010	5A, 5B	8	12	1.9	12	0.0	0.5
2011	5A, 5B, 6	4	12	1.9	12	0.0	0.5
2012	6, 8	0	12	1.9	12	0.0	0.5
2013	8	0	12	1.9	12	0.0	0.5
SBCAPCD Annual Guidelines (Rule 202F)				**25**	**25**	**25**	**25**

Source: LSA Associates, Inc., July 2004.

5.1.3 Diesel Toxics Analysis

The following discussion of diesel toxics evaluates two issues: (1) the general health risks of air toxics and the current contribution of diesel trucks to those risks; and (2) the project's potential air toxics impact.

Chemicals surround us all our lives. Some are beneficial and some are harmful. Some are necessary for good health in small amounts, but harmful in larger amounts. Determining how hazardous a substance is depends on many factors, including the amount, how it enters the body, how long the exposure is, and what organs in the body are affected. One major way these substances enter the body is through inhalation. The form can be either gas or particulate. While many gases are harmful, very small particles penetrate deep into the lungs, contributing to a range of health problems. Exhaust from diesel engines is a major source of these airborne particles. California's Office of Environmental Health Hazard Assessment (OEHHA) has determined that long-term exposure to diesel exhaust particulate poses the highest cancer risk of any toxic air contaminant it has evaluated. Fortunately, improvements to diesel fuel and diesel engines have already reduced emissions of some of the pollutants associated with diesel exhaust. The ARB has developed a Diesel Risk Reduction Plan which, when fully implemented, will result in a 75 percent reduction in particle emissions from diesel equipment by 2010 (compared to 2000 levels) and an 85 percent reduction by 2020.

As shown in Table G above, it is expected that construction of this project will generate PM_{10} emissions far below district thresholds. URBEMIS 2002 includes PM_{10} from both fugitive dust generating activities and diesel-powered equipment exhaust. The diesel toxics of concern are the exhaust portion of the PM_{10} results. Using the OEHHA technique for estimating potential health risks, as described in the Air Toxics Hot Spots Program Risk Assessment Guidelines (OEHHA August 2003), Appendix I, the carcinogenic and chronic health risks to nearby sensitive receptors would be less than their respective thresholds of ten in a million and the index of 1.0, even assuming the worst case, that all the PM_{10} shown above is diesel exhaust particulate. Therefore, project construction will not cause a significant increase in toxic air constituents in the project vicinity.

5.2 POTENTIALLY SIGNIFICANT IMPACTS

5.2.1 Long-Term Regional Air Quality Impacts

Long-term air emission impacts are those associated with stationary sources and mobile sources related to any change related to the proposed project. The proposed hospital reconstruction would result in both stationary and mobile source changes. The stationary source emissions from the hospital uses would come from the consumption of natural gas. Based on the traffic study prepared for this project (LSA, July 2004), implementation of the proposed project would increase daily trips from 6,123 to 7,544. Long-term operational emissions associated with the hospital, calculated with the URBEMIS 2002 model, are presented in Table H and show the impact of the project. The increase in emissions from the hospital reconstruction exceeds ROC and NO_X thresholds based on emission factors for year 2004. Therefore, the project-related long-term air quality impacts would be significant. Mitigation measures are required.

5.3 AIR QUALITY MANAGEMENT PLAN CONSISTENCY AND CUMULATIVE IMPACTS

In order to accurately assess the environmental impacts as a result of new or renovated developments, environmental pollution and population growth are projected for future scenarios.

Table H: Santa Barbara Cottage Hospital Operational Emissions

Source	Pollutants, lbs/day		
	ROC	NO_X	PM_{10}
Existing vehicle-related emissions	115	157	98
Reconstruction vehicle-related emissions	141	194	120
Net Vehicle-Related Project Emissions Increase	**26**	**37**	**22**
SBCAPCD Threshold	**25**	**25**	**80**
Exceed SBCAPCD Threshold?	**Yes**	**Yes**	**No**
Significant Air Quality Impact?	**Yes**	**Yes**	**No**
Existing stationary source emissions	0.04	0.53	0
Total project emissions	115	158	98
Reconstruction stationary source emissions	0.05	0.66	0
Total project emissions	141	195	120
Net Total Project Emissions Increase	**26**	**37**	**22**
SBCAPCD Threshold	**240**	**240**	**80**
Exceed SBCAPCD Threshold?	**No**	**No**	**No**
Significant Air Quality Impact?	**No**	**No**	**No**

Source: LSA Associates, Inc., July 2004.

The proposed project is a hospital reconstruction/renovation project. There will be no population growth associated with the proposed project. The project is proposed to accommodate the need for hospital use as population grows with the City's General Plan projections. The project is consistent with the adopted CAP. The CO hot spot analysis shows a less-than-significant increase in CO concentrations from the project.

5.4 STANDARD CONDITIONS

Construction Impacts. The project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SBCAPCD Rule 302 requires that fugitive dust be controlled so that the presence of such dust is not darker than No. 1 on the Ringelmann Chart. In addition, SBCAPCD Rule 303 requires implementation of techniques to prevent fugitive dust from creating a nuisance. Implementation of the dust suppression techniques listed below can reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)

- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) section 23114 (freeboard means vertical space between the top of the load and top of the trailer).
- Pave construction access roads at least 100 feet onto the site from main road.
- Traffic speeds on all unpaved roads shall be reduced to 15 mph or less.

Standard Conditions

1. The following measure would reduce or minimize air pollutant emissions associated with asphalt paving:

    - The construction contractor shall adhere to the requirements of SBCAPCD rules and regulations on cutback and emulsified asphalt paving materials.

2. At all times, fugitive dust emissions shall be controlled using the following procedures:

    - On-site vehicle speed shall be limited to 15 mph.
    - Road improvements shall be paved as soon as feasible, watered periodically, or chemically stabilized.

3. At all times during the construction phase, ozone precursor emissions from mobile equipment shall be controlled using the following procedures:

    - Equipment engines shall be maintained in good condition and in proper tune according to the manufacturer's specifications.
    - On-site mobile equipment should not be left idling for a period longer than 60 seconds.

4. Outdoor storage piles of construction materials shall be kept covered, watered, or otherwise chemically stabilized with a chemical wetting agent to minimize fugitive dust emissions and wind erosion.

Project Operations. The project is expected to create vehicular daily emissions exceeding the daily emissions thresholds established by the SBCAPCD.

The proposed project will be required to comply with Title 24 of the California Code of Regulations established by the Energy Commission regarding energy conservation standards. The project applicant shall incorporate the following in building plans:

- Solar or low-emission water heaters shall be used with combined space/water heater units.
- Double-paned glass or window treatment for energy conservation shall be used in all exterior windows.
- Buildings shall be oriented north/south where feasible.

5.5 ADDITIONAL RECOMMENDED MEASURES

A. The Construction Contractor shall select the construction equipment used on site based on low-emission factors and high energy efficiency. The Construction Contractor shall ensure that construction grading plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturer's specifications.

B. The Construction Contractor shall utilize electric or diesel powered equipment in lieu of gasoline powered engines where feasible.

C. The Construction Contractor shall ensure that construction grading plans include a statement that work crews will shut off equipment when not in use. During smog season (May through October), the overall length of the construction period will be extended, thereby decreasing the size of the area prepared each day, to minimize vehicles and equipment operating at the same time.

D. The Construction Contractor shall time the construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.

E. The Construction Contractor shall support and encourage ridesharing and transit incentives for the construction crew.

F. Compliance with the SBCAPCD Rules and Regulations on the use of architectural coatings should be implemented. Emissions associated with architectural coatings would be reduced by complying with these rules and regulations, which include using pre-coated/natural colored building materials, using water-based or low-VOC coating, and using coating transfer or spray equipment with high transfer efficiency.

Operational Impacts

There are no feasible project-specific mitigation measures to reduce the operational emissions of ROC and NO_X to below the SBCAPCD emissions thresholds.

6.0 REFERENCES

California Air Resources Board Web site, www.arb.ca.gov.

Guidelines for Implementation of CEQA, SBCAPCD, 2000.

Santa Barbara City General Plan.

Santa Barbara Cottage Hospital Seismic Compliance and Modernization Plan, 2003.

Scope and Content of Air Quality Sections in Environmental Documents, SBCAPCD, June 2004.

Santa Barbara County Clean Air Plan, 2001.

Transportation Project-Level Carbon Monoxide Protocol, Caltrans, 1997.

Western Regional Climatic Center, www.wrcc.dri.edu.

APPENDIX A

URBEMIS 2002 MODELING

CONSTRUCTION

URBEMIS 2002 For Windows 7.5.0

File Name: <Not Saved>
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2004 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.33	2.64	2.41	0.00	0.11	0.11	0.00
TOTALS (tpy, mitigated)	0.32	2.60	2.36	0.00	0.11	0.11	0.00

URBEMIS 2002 For Windows 7.5.0

File Name: <Not Saved>
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: November, 2004
Construction Duration: 2
Total Land Use Area to be Developed: 0.12 acres
Maximum Acreage Disturbed Per Day: 0.1 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2004***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.01	0.08	0.06	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.01	0.08	0.06	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.02	0.16	0.17	-	0.01	0.01	0.00
On-Road Diesel	0.00	0.04	0.01	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	0.02	0.20	0.19	0.00	0.01	0.01	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.29	2.30	2.11	-	0.10	0.10	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.01	0.05	0.05	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.30	2.36	2.16	0.00	0.10	0.10	0.00
Total all phases tons/yr	0.33	2.64	2.41	0.00	0.11	0.11	0.00

Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Nov '04
Phase 1 Duration: 0.1 months
Building Volume Total (cubic feet): 2700000
Building Volume Daily (cubic feet): 1080
On-Road Truck Travel (VMT): 60
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Nov '04
Phase 2 Duration: 0.2 months
On-Road Truck Travel (VMT): 568
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Nov '04
Phase 3 Duration: 1.7 months
Start Month/Year for SubPhase Building: Nov '04
SubPhase Building Duration: 1.7 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day

2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Start Month/Year for SubPhase Architectural Coatings: Dec '04
SubPhase Architectural Coatings Duration: 0.2 months
Start Month/Year for SubPhase Asphalt: Dec '04
SubPhase Asphalt Duration: 0.1 months
Acres to be Paved: 1.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
1	Paving Equipment	111	0.530	8.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

Phase 1 mitigation measure Off-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 1 mitigation measure Off-Road Diesel Exhaust: Use cooled exhaust gas recirculation
has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use cooled exhaust gas recirculation(EGR)
has been changed from off to on.
Phase 1 mitigation measure Worker Trips: Use shuttle to retail establishments @lunch
has been changed from off to on.

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2005 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2005 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.95	14.62	15.03	0.00	0.69	0.68	0.01
TOTALS (tpy, mitigated)	1.90	14.39	14.69	0.00	0.67	0.66	0.01

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2005 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: January, 2005
Construction Duration: 12
Total Land Use Area to be Developed: 0.12 acres
Maximum Acreage Disturbed Per Day: 0.1 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2005***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.06	0.47	0.38	-	0.02	0.02	0.00
On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Total tons/year	0.06	0.48	0.40	0.00	0.02	0.02	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.01	-	0.01
Off-Road Diesel	0.13	0.92	1.06	-	0.04	0.04	0.00
On-Road Diesel	0.00	0.04	0.01	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Total tons/year	0.13	0.96	1.10	0.00	0.05	0.04	0.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	1.73	12.95	13.26	-	0.61	0.61	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.03	0.22	0.27	-	0.01	0.01	0.00
Asphalt On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	1.76	13.18	13.53	0.00	0.62	0.62	0.00
Total all phases tons/yr	1.95	14.62	15.03	0.00	0.69	0.68	0.01

Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '05
Phase 1 Duration: 0.6 months
Building Volume Total (cubic feet): 300000
Building Volume Daily (cubic feet): 1080
On-Road Truck Travel (VMT): 60
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '05
Phase 2 Duration: 1.2 months
On-Road Truck Travel (VMT): 94
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Feb '05
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Feb '05
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day

2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Start Month/Year for SubPhase Architectural Coatings: Dec '05
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: Dec '05
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 1.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
1	Paving Equipment	111	0.530	8.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

Phase 1 mitigation measure Off-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 1 mitigation measure Off-Road Diesel Exhaust: Use cooled exhaust gas recirculation
has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use cooled exhaust gas recirculation(EGR)
has been changed from off to on.
Phase 1 mitigation measure Worker Trips: Use shuttle to retail establishments @lunch
has been changed from off to on.

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2006 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.95	14.16	15.37	0.00	0.59	0.58	0.01
TOTALS (tpy, mitigated)	1.90	13.95	15.01	0.00	0.57	0.56	0.01

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2006 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: January, 2006
Construction Duration: 12
Total Land Use Area to be Developed: 0.12 acres
Maximum Acreage Disturbed Per Day: 0.1 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.06	0.44	0.40	-	0.02	0.02	0.00
On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Total tons/year	0.06	0.45	0.42	0.00	0.02	0.02	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.01	-	0.01
Off-Road Diesel	0.13	0.90	1.07	-	0.04	0.04	0.00
On-Road Diesel	0.00	0.03	0.01	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Total tons/year	0.13	0.93	1.11	0.00	0.05	0.04	0.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	1.73	12.55	13.57	-	0.51	0.51	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.03	0.22	0.27	-	0.01	0.01	0.00
Asphalt On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	1.76	12.78	13.84	0.00	0.52	0.52	0.00
Total all phases tons/yr	1.95	14.16	15.37	0.00	0.59	0.58	0.01

Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '06
Phase 1 Duration: 0.6 months
Building Volume Total (cubic feet): 2700000
Building Volume Daily (cubic feet): 1080
On-Road Truck Travel (VMT): 60
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '06
Phase 2 Duration: 1.2 months
On-Road Truck Travel (VMT): 94
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Feb '06
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Feb '06
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day

2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Start Month/Year for SubPhase Architectural Coatings: Dec '06
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: Dec '06
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 1.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
1	Paving Equipment	111	0.530	8.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

Phase 1 mitigation measure Off-Road Diesel Exhaust: Use aqueous diesel fuel has been changed from off to on.
Phase 1 mitigation measure Off-Road Diesel Exhaust: Use cooled exhaust gas recirculation has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use aqueous diesel fuel has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use cooled exhaust gas recirculation(EGR) has been changed from off to on.
Phase 1 mitigation measure Worker Trips: Use shuttle to retail establishments @lunch has been changed from off to on.

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2007 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.95	13.68	15.59	0.00	0.58	0.57	0.01
TOTALS (tpy, mitigated)	1.90	13.48	15.22	0.00	0.56	0.55	0.01

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2007 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: January, 2007
Construction Duration: 12
Total Land Use Area to be Developed: 0.12 acres
Maximum Acreage Disturbed Per Day: 0.1 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source *** 2007***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.06	0.42	0.41	-	0.02	0.02	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Total tons/year	0.06	0.42	0.43	0.00	0.02	0.02	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.01	-	0.01
Off-Road Diesel	0.13	0.87	1.08	-	0.03	0.03	0.00
On-Road Diesel	0.00	0.03	0.01	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Total tons/year	0.13	0.90	1.12	0.00	0.04	0.03	0.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	1.73	12.14	13.77	-	0.51	0.51	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.03	0.21	0.27	-	0.01	0.01	0.00
Asphalt On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	1.76	12.36	14.04	0.00	0.52	0.52	0.00
Total all phases tons/yr	1.95	13.68	15.59	0.00	0.58	0.57	0.01

Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '07
Phase 1 Duration: 0.6 months
Building Volume Total (cubic feet): 0
Building Volume Daily (cubic feet): 0
Miles per round trip set to zero
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '07
Phase 2 Duration: 1.2 months
On-Road Truck Travel (VMT): 94
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Feb '07
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Feb '07
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day

2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Start Month/Year for SubPhase Architectural Coatings: Dec '07
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: Dec '07
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 1.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
1	Paving Equipment	111	0.530	8.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

Phase 1 mitigation measure Off-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 1 mitigation measure Off-Road Diesel Exhaust: Use cooled exhaust gas recirculation
has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use cooled exhaust gas recirculation(EGR)
has been changed from off to on.
Phase 1 mitigation measure Worker Trips: Use shuttle to retail establishments @lunch
has been changed from off to on.

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2009 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.95	12.66	16.15	0.00	0.48	0.47	0.01
TOTALS (tpy, mitigated)	1.90	12.48	15.75	0.00	0.46	0.45	0.01

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2009 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: January, 2009
Construction Duration: 12
Total Land Use Area to be Developed: 0.12 acres
Maximum Acreage Disturbed Per Day: 0.1 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2009***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.06	0.38	0.44	-	0.02	0.02	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	0.06	0.38	0.45	0.00	0.02	0.02	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.01	-	0.01
Off-Road Diesel	0.13	0.82	1.11	-	0.03	0.03	0.00
On-Road Diesel	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Total tons/year	0.13	0.85	1.14	0.00	0.04	0.03	0.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	1.73	11.22	14.28	-	0.41	0.41	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.03	0.20	0.28	-	0.01	0.01	0.00
Asphalt On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	1.76	11.43	14.56	0.00	0.42	0.42	0.00
Total all phases tons/yr	1.95	12.66	16.15	0.00	0.48	0.47	0.01

Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '09
Phase 1 Duration: 0.6 months
Building Volume Total (cubic feet): 75000
Building Volume Daily (cubic feet): 360
On-Road Truck Travel (VMT): 21
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '09
Phase 2 Duration: 1.2 months
On-Road Truck Travel (VMT): 94
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Feb '09
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Feb '09
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day

2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Start Month/Year for SubPhase Architectural Coatings: Dec '09
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: Dec '09
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 1.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
1	Paving Equipment	111	0.530	8.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

Phase 1 mitigation measure Off-Road Diesel Exhaust: Use aqueous diesel fuel has been changed from off to on.
Phase 1 mitigation measure Off-Road Diesel Exhaust: Use cooled exhaust gas recirculation has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use aqueous diesel fuel has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use cooled exhaust gas recirculation(EGR) has been changed from off to on.
Phase 1 mitigation measure Worker Trips: Use shuttle to retail establishments @lunch has been changed from off to on.

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2010 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2010 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.95	12.20	16.48	0.00	0.47	0.46	0.01
TOTALS (tpy, mitigated)	1.90	12.03	16.07	0.00	0.46	0.45	0.01

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2010 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: January, 2010
Construction Duration: 12
Total Land Use Area to be Developed: 0.12 acres
Maximum Acreage Disturbed Per Day: 0.1 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2010***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.06	0.36	0.46	-	0.01	0.01	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	0.06	0.36	0.47	0.00	0.01	0.01	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.01	-	0.01
Off-Road Diesel	0.13	0.79	1.11	-	0.03	0.03	0.00
On-Road Diesel	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Total tons/year	0.13	0.82	1.14	0.00	0.04	0.03	0.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	1.73	10.81	14.59	-	0.41	0.41	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.03	0.20	0.28	-	0.01	0.01	0.00
Asphalt On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	1.76	11.02	14.87	0.00	0.42	0.42	0.00
Total all phases tons/yr	1.95	12.20	16.48	0.00	0.47	0.46	0.01

Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '10
Phase 1 Duration: 0.6 months
Building Volume Total (cubic feet): 1200000
Building Volume Daily (cubic feet): 360
On-Road Truck Travel (VMT): 21
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '10
Phase 2 Duration: 1.2 months
On-Road Truck Travel (VMT): 94
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Feb '10
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Feb '10
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

Phase 1 mitigation measure Off-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 1 mitigation measure Off-Road Diesel Exhaust: Use cooled exhaust gas recirculation
has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use cooled exhaust gas recirculation(EGR)
has been changed from off to on.
Phase 1 mitigation measure Worker Trips: Use shuttle to retail establishments @lunch
has been changed from off to on.

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2013 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2013 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.31	8.13	10.96	0.00	0.31	0.30	0.01
TOTALS (tpy, mitigated)	1.27	8.01	10.69	0.00	0.30	0.29	0.01

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\2013 Const.urb
Project Name: SB Cottage Hospital Construction
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: January, 2013
Construction Duration: 8
Total Land Use Area to be Developed: 0.12 acres
Maximum Acreage Disturbed Per Day: 0.1 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2013***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.04	0.24	0.30	-	0.01	0.01	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	0.04	0.24	0.31	0.00	0.01	0.01	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.01	-	0.01
Off-Road Diesel	0.09	0.53	0.74	-	0.02	0.02	0.00
On-Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	0.09	0.55	0.76	0.00	0.03	0.02	0.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	1.16	7.21	9.72	-	0.27	0.27	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.02	0.12	0.17	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	1.18	7.34	9.89	0.00	0.27	0.27	0.00
Total all phases tons/yr	1.31	8.13	10.96	0.00	0.31	0.30	0.01

Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Jan '13
Phase 1 Duration: 0.4 months
Building Volume Total (cubic feet): 0
Building Volume Daily (cubic feet): 0
Miles per round trip set to zero
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jan '13
Phase 2 Duration: 0.8 months
On-Road Truck Travel (VMT): 142
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Feb '13
Phase 3 Duration: 6.8 months
Start Month/Year for SubPhase Building: Feb '13
SubPhase Building Duration: 6.8 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day

2	Crawler Tractors	143	0.575	8.0
2	Crushing/Processing Equip	154	0.780	8.0
2	Graders	174	0.575	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Start Month/Year for SubPhase Architectural Coatings: Aug '13
SubPhase Architectural Coatings Duration: 0.7 months
Start Month/Year for SubPhase Asphalt: Aug '13
SubPhase Asphalt Duration: 0.3 months
Acres to be Paved: 1.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Pavers	132	0.590	8.0
1	Paving Equipment	111	0.530	8.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

Phase 1 mitigation measure Off-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 1 mitigation measure Off-Road Diesel Exhaust: Use cooled exhaust gas recirculation
has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 1 mitigation measure On-Road Diesel Exhaust: Use cooled exhaust gas recirculation(EGR)
has been changed from off to on.
Phase 1 mitigation measure Worker Trips: Use shuttle to retail establishments @lunch
has been changed from off to on.

APPENDIX B

URBEMIS 2002 MODELING

OPERATIONS

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\Existing.urb
Project Name: Cottage Hospital
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.04	0.53	0.21	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	98.93	135.63	1,188.47	1.09	100.91

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	98.97	136.17	1,188.68	1.09	100.91

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\Existing.urb
Project Name: Cottage Hospital
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.04	0.53	0.21	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	132.07	176.31	1,327.89	1.01	100.91

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	132.11	176.85	1,328.10	1.01	100.91

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\Existing.urb
Project Name: Cottage Hospital
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.04	0.53	0.21	-	0.00
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emissions					
Consumer Prdcts	0.00	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.04	0.53	0.21	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Hospital	132.07	176.31	1,327.89	1.01	100.91
TOTAL EMISSIONS (lbs/day)	132.07	176.31	1,327.89	1.01	100.91

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2004 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Hospital	62.96 trips / beds	97.26	6,123.17

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	56.10	2.70	96.80	0.50
Light Truck < 3,750 lbs	15.10	4.60	92.70	2.70
Light Truck 3,751- 5,750	15.60	2.60	96.20	1.20
Med Truck 5,751- 8,500	6.90	2.90	94.20	2.90
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.80	0.00	12.50	87.50
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.60	87.50	12.50	0.00
School Bus	0.20	0.00	0.00	100.00
Motor Home	1.30	15.40	76.90	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.5	9.6	11.3	12.5	10.2	10.2
Rural Trip Length (miles)	15.0	15.0	15.0	15.0	10.0	10.0
Trip Speeds (mph)	25.0	30.0	35.0	25.0	25.0	25.0
% of Trips - Residential	20.6	18.0	61.4			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.5	62.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The fireplcase option switch changed from on to off.

Changes made to the default values for Operations

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\Existing.urb
Project Name: Cottage Hospital
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.04	0.53	0.21	-	0.00
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.00	0.00	0.00	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.04	0.53	0.21	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Hospital	98.93	135.63	1,188.47	1.09	100.91
TOTAL EMISSIONS (lbs/day)	98.93	135.63	1,188.47	1.09	100.91

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2004 Temperature (F): 75 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Hospital	62.96 trips / beds	97.26	6,123.17

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	56.10	2.70	96.80	0.50
Light Truck < 3,750 lbs	15.10	4.60	92.70	2.70
Light Truck 3,751- 5,750	15.60	2.60	96.20	1.20
Med Truck 5,751- 8,500	6.90	2.90	94.20	2.90
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.80	0.00	12.50	87.50
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.60	87.50	12.50	0.00
School Bus	0.20	0.00	0.00	100.00
Motor Home	1.30	15.40	76.90	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.5	9.6	11.3	12.5	10.2	10.2
Rural Trip Length (miles)	15.0	15.0	15.0	15.0	10.0	10.0
Trip Speeds (mph)	25.0	30.0	35.0	25.0	25.0	25.0
% of Trips - Residential	20.6	18.0	61.4			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.5	62.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The fireplcase option switch changed from on to off.

Changes made to the default values for Operations

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\Existing Plus Project.urb
Project Name: Cottage Hospital
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.05	0.66	0.26	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	121.89	167.11	1,464.25	1.34	124.33

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	121.94	167.77	1,464.51	1.34	124.33

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\Existing Plus Project.urb
Project Name: Cottage Hospital
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.05	0.66	0.26	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	162.71	217.23	1,636.02	1.25	124.33

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	162.76	217.88	1,636.28	1.25	124.33

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\Existing Plus Project.urb
Project Name: Cottage Hospital
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.05	0.66	0.26	-	0.00
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emissions					
Consumer Prdcts	0.00	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.05	0.66	0.26	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Hospital	162.71	217.23	1,636.02	1.25	124.33
TOTAL EMISSIONS (lbs/day)	162.71	217.23	1,636.02	1.25	124.33

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2004 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Hospital	62.96 trips / beds	119.82	7,544.06

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	56.10	2.70	96.80	0.50
Light Truck < 3,750 lbs	15.10	4.60	92.70	2.70
Light Truck 3,751- 5,750	15.60	2.60	96.20	1.20
Med Truck 5,751- 8,500	6.90	2.90	94.20	2.90
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.80	0.00	12.50	87.50
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.60	87.50	12.50	0.00
School Bus	0.20	0.00	0.00	100.00
Motor Home	1.30	15.40	76.90	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.5	9.6	11.3	12.5	10.2	10.2
Rural Trip Length (miles)	15.0	15.0	15.0	15.0	10.0	10.0
Trip Speeds (mph)	25.0	30.0	35.0	25.0	25.0	25.0
% of Trips - Residential	20.6	18.0	61.4			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.5	62.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The fireplcase option switch changed from on to off.

Changes made to the default values for Operations

URBEMIS 2002 For Windows 7.5.0

File Name: H:\RonaldB\Files\Projects\CSB430 Cottage Hospital\Existing Plus Project.urb
Project Name: Cottage Hospital
Project Location: Santa Barbara County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.05	0.66	0.26	-	0.00
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.00	0.00	0.00	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.05	0.66	0.26	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Hospital	121.89	167.11	1,464.25	1.34	124.33
TOTAL EMISSIONS (lbs/day)	121.89	167.11	1,464.25	1.34	124.33

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2004 Temperature (F): 75 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Hospital	62.96 trips / beds	119.82	7,544.06

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	56.10	2.70	96.80	0.50
Light Truck < 3,750 lbs	15.10	4.60	92.70	2.70
Light Truck 3,751- 5,750	15.60	2.60	96.20	1.20
Med Truck 5,751- 8,500	6.90	2.90	94.20	2.90
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.80	0.00	12.50	87.50
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.60	87.50	12.50	0.00
School Bus	0.20	0.00	0.00	100.00
Motor Home	1.30	15.40	76.90	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.5	9.6	11.3	12.5	10.2	10.2
Rural Trip Length (miles)	15.0	15.0	15.0	15.0	10.0	10.0
Trip Speeds (mph)	25.0	30.0	35.0	25.0	25.0	25.0
% of Trips - Residential	20.6	18.0	61.4			
% of Trips - Commercial (by land use)						
Hospital				25.0	12.5	62.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The fireplcase option switch changed from on to off.

Changes made to the default values for Operations

APPENDIX C

CALINE4 MODEL RUNS

COTTAGE HOSPITAL PROJECT

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

EXISTING BASELINE CONDITIONS

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Junipero NBA	*	0	-150	0	0	*	AG	82	5.9	.0	10.0
B. Junipero NBD	*	0	0	0	150	*	AG	0	5.9	.0	10.0
C. Junipero NBL	*	2	-150	0	0	*	AG	39	5.9	.0	10.0
D. Junipero SBA	*	0	150	0	0	*	AG	0	5.9	.0	10.0
E. Junipero SBD	*	0	0	0	-150	*	AG	150	5.9	.0	10.0
F. Junipero SBL	*	-2	150	0	0	*	AG	0	5.9	.0	10.0
G. Bath St.EBA	*	-150	-2	0	-2	*	AG	97	5.9	.0	10.0
H. Bath St.EBD	*	0	-2	150	-2	*	AG	137	5.9	.0	10.0
I. Bath St.EBL	*	-150	-2	0	0	*	AG	0	5.9	.0	10.0
J. Bath St.WBA	*	150	2	0	2	*	AG	154	5.9	.0	10.0
K. Bath St.WBD	*	0	2	-150	2	*	AG	193	5.9	.0	10.0
L. Bath St.WBL	*	150	2	0	0	*	AG	108	5.9	.0	10.0
M. Junipero NBA	*	0	-750	0	-150	*	AG	121	5.9	.0	10.0
N. Junipero NBD	*	0	150	0	750	*	AG	0	5.9	.0	10.0
O. Junipero SBA	*	0	750	0	150	*	AG	0	5.9	.0	10.0
P. Junipero SBD	*	0	-150	0	-750	*	AG	150	5.9	.0	10.0
Q. Bath St.EBAX	*	-750	-2	-150	-2	*	AG	97	5.9	.0	10.0
R. Bath St.EBDX	*	150	-2	750	-2	*	AG	137	5.9	.0	10.0
S. Bath St.WBAX	*	750	2	150	2	*	AG	262	5.9	.0	10.0
T. Bath St.WBDX	*	-150	2	-750	2	*	AG	193	5.9	.0	10.0

JOB: Cottage Hospital
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	7	-8	1.8
2. NW	*	-7	8	1.8
3. SW	*	-7	-8	1.8
4. NE	*	7	8	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	8	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	8	1.8
9. SE mdblk	*	7	-150	1.8
10. NW mdblk	*	-7	150	1.8
11. SW mdblk	*	-7	-150	1.8
12. NE mdblk	*	7	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	8	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	8	1.8
17. SE blk	*	7	-600	1.8
18. NW blk	*	-7	600	1.8
19. SW blk	*	-7	-600	1.8
20. NE blk	*	7	600	1.8

JOB: Cottage Hospital
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	84.	.4	.0	.0	.0	.0	.0	.0	.0	.1
2. NW	175.	.5	.0	.0	.0	.0	.1	.0	.0	.0
3. SW	84.	.5	.0	.0	.0	.0	.0	.0	.0	.1
4. NE	185.	.5	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	95.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	86.	.4	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.3	.0	.0	.0	.0	.1	.0	.0	.0
10. NW mdblk	178.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.3	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	181.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	179.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	*	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Junipero NBA	*	2	-150	2	0	* AG	135	5.9	.0	10.0
B. Junipero NBD	*	2	0	2	150	* AG	131	5.9	.0	10.0
C. Junipero NBL	*	2	-150	0	0	* AG	19	5.9	.0	10.0
D. Junipero SBA	*	-2	150	-2	0	* AG	139	5.9	.0	10.0
E. Junipero SBD	*	-2	0	-2	-150	* AG	202	5.9	.0	10.0
F. Junipero SBL	*	-2	150	0	0	* AG	29	5.9	.0	10.0
G. Castillo EBA	*	-150	-2	0	-2	* AG	103	5.9	.0	10.0
H. Castillo EBD	*	0	-2	150	-2	* AG	148	5.9	.0	10.0
I. Castillo EBL	*	-150	-2	0	0	* AG	16	5.9	.0	10.0
J. Castillo WBA	*	150	2	0	2	* AG	55	5.9	.0	10.0
K. Castillo WBD	*	0	2	-150	2	* AG	57	5.9	.0	10.0
L. Castillo WBL	*	150	2	0	0	* AG	42	5.9	.0	10.0
M. Junipero NBA	*	2	-750	2	-150	* AG	154	5.9	.0	10.0
N. Junipero NBD	*	2	150	2	750	* AG	131	5.9	.0	10.0
O. Junipero SBA	*	-2	750	-2	150	* AG	168	5.9	.0	10.0
P. Junipero SBD	*	-2	-150	-2	-750	* AG	202	5.9	.0	10.0
Q. Castillo EBA	*	-750	-2	-150	-2	* AG	119	5.9	.0	10.0
R. Castillo EBD	*	150	-2	750	-2	* AG	148	5.9	.0	10.0
S. Castillo WBA	*	750	2	150	2	* AG	97	5.9	.0	10.0
T. Castillo WBD	*	-150	2	-750	2	* AG	57	5.9	.0	10.0

JOB: Cottage Hospital
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-8	8	1.8
3. SW	*	-8	-8	1.8
4. NE	*	8	8	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	8	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	8	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	8	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	8	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.4	.0	.1	.0	.0	.0	.0	.0	.0
2. NW	174.	.4	.0	.0	.0	.0	.2	.0	.0	.0
3. SW	85.	.4	.0	.0	.0	.0	.0	.0	.0	.1
4. NE	186.	.5	.1	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	95.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.3	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.4	.1	.0	.0	.0	.1	.0	.0	.0
10. NW mdblk	175.	.4	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	6.	.4	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	185.	.4	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.4	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Junipero NBA	*	2	-150	2	0	* AG	162	5.9	.0	10.0
B. Junipero NBD	*	2	0	2	150	* AG	155	5.9	.0	10.0
C. Junipero NBL	*	2	-150	0	0	* AG	0	5.9	.0	10.0
D. Junipero SBA	*	-2	150	-2	0	* AG	212	5.9	.0	10.0
E. Junipero SBD	*	-2	0	-2	-150	* AG	238	5.9	.0	10.0
F. Junipero SBL	*	-2	150	0	0	* AG	9	5.9	.0	10.0
G. Oak Park EBA	*	-150	0	0	0	* AG	0	5.9	.0	10.0
H. Oak Park EBD	*	0	0	150	0	* AG	30	5.9	.0	10.0
I. Oak Park EBL	*	-150	-2	0	0	* AG	0	5.9	.0	10.0
J. Oak Park WBA	*	150	0	0	0	* AG	14	5.9	.0	10.0
K. Oak Park WBD	*	0	0	-150	0	* AG	0	5.9	.0	10.0
L. Oak Park WBL	*	150	2	0	0	* AG	26	5.9	.0	10.0
M. Junipero NBA	*	2	-750	2	-150	* AG	162	5.9	.0	10.0
N. Junipero NBD	*	2	150	2	750	* AG	155	5.9	.0	10.0
O. Junipero SBA	*	-2	750	-2	150	* AG	221	5.9	.0	10.0
P. Junipero SBD	*	-2	-150	-2	-750	* AG	238	5.9	.0	10.0
Q. Oak Park EBA	*	-750	0	-150	0	* AG	0	5.9	.0	10.0
R. Oak Park EBD	*	150	0	750	0	* AG	30	5.9	.0	10.0
S. Oak Park WBA	*	750	0	150	0	* AG	40	5.9	.0	10.0
T. Oak Park WBD	*	-150	0	-750	0	* AG	0	5.9	.0	10.0

JOB: Cottage Hospital
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-7	1.8
2. NW	*	-8	7	1.8
3. SW	*	-8	-7	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-7	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-7	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-7	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-7	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.4	.0	.1	.0	.1	.0	.0	.0	.0
2. NW	174.	.4	.0	.0	.0	.0	.2	.0	.0	.0
3. SW	174.	.4	.0	.0	.0	.0	.2	.0	.0	.0
4. NE	186.	.4	.1	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	278.	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	89.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	263.	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.4	.2	.0	.0	.0	.1	.0	.0	.0
10. NW mdblk	174.	.4	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	6.	.4	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	185.	.4	.0	.1	.0	.1	.0	.0	.0	.0
13. ES blk	274.	.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	90.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	266.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.4	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Nogales ANBA	*	2	-150	2	0	* AG	67	5.9	.0	10.0
B. Nogales ANBD	*	2	0	2	150	* AG	0	5.9	.0	10.0
C. Nogales ANBL	*	2	-150	0	0	* AG	0	5.9	.0	10.0
D. Nogales ASBA	*	0	150	0	0	* AG	0	5.9	.0	10.0
E. Nogales ASBD	*	0	0	0	-150	* AG	29	5.9	.0	10.0
F. Nogales ASBL	*	-2	150	0	0	* AG	0	5.9	.0	10.0
G. De La VinEBA	*	-150	-4	0	-4	* AG	813	5.9	.0	10.0
H. De La VinEBD	*	0	-4	150	-4	* AG	851	5.9	.0	10.0
I. De La VinEBL	*	-150	-2	0	0	* AG	0	5.9	.0	10.0
J. De La VinWBA	*	150	0	0	0	* AG	0	5.9	.0	10.0
K. De La VinWBD	*	0	0	-150	0	* AG	0	5.9	.0	10.0
L. De La VinWBL	*	150	2	0	0	* AG	0	5.9	.0	10.0
M. Nogales ANBA	*	2	-750	2	-150	* AG	67	5.9	.0	10.0
N. Nogales ANBD	*	2	150	2	750	* AG	0	5.9	.0	10.0
O. Nogales ASBA	*	0	750	0	150	* AG	0	5.9	.0	10.0
P. Nogales ASBD	*	0	-150	0	-750	* AG	29	5.9	.0	10.0
Q. De La VinEBA	*	-750	-4	-150	-4	* AG	813	5.9	.0	10.0
R. De La VinEBD	*	150	-4	750	-4	* AG	851	5.9	.0	10.0
S. De La VinWBA	*	750	0	150	0	* AG	0	5.9	.0	10.0
T. De La VinWBD	*	-150	0	-750	0	* AG	0	5.9	.0	10.0

JOB: Cottage Hospital
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-10	1.8
2. NW	-7	7	1.8
3. SW	-7	-10	1.8
4. NE	8	7	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	7	1.8
17. SE blk	8	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	8	600	1.8

JOB: Cottage Hospital
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	84.	.8	.0	.0	.0	.0	.0	.0	.0	.7
2. NW	96.	.6	.0	.0	.0	.0	.0	.0	.0	.4
3. SW	84.	.8	.0	.0	.0	.0	.0	.0	.0	.6
4. NE	96.	.6	.0	.0	.0	.0	.0	.0	.0	.4
5. ES mdblk	276.	.8	.0	.0	.0	.0	.0	.0	.0	.7
6. WN mdblk	96.	.6	.0	.0	.0	.0	.0	.0	.4	.1
7. WS mdblk	84.	.8	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	264.	.6	.0	.0	.0	.0	.0	.0	.1	.4
9. SE mdblk	351.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	178.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	181.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.8	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	179.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	*	2	-150	2	0	* AG	171	5.9	.0	10.0
B. Pueblo StNBD	*	2	0	2	150	* AG	146	5.9	.0	10.0
C. Pueblo StNBL	*	2	-150	0	0	* AG	0	5.9	.0	10.0
D. Pueblo StSBA	*	-2	150	-2	0	* AG	58	5.9	.0	10.0
E. Pueblo StSBD	*	-2	0	-2	-150	* AG	120	5.9	.0	10.0
F. Pueblo StSBL	*	-2	150	0	0	* AG	16	5.9	.0	10.0
G. De La VinEBA	*	-150	-2	0	-2	* AG	806	5.9	.0	10.0
H. De La VinEBD	*	0	-2	150	-2	* AG	837	5.9	.0	10.0
I. De La VinEBL	*	-150	-2	0	0	* AG	52	5.9	.0	10.0
J. De La VinWBA	*	150	0	0	0	* AG	0	5.9	.0	10.0
K. De La VinWBD	*	0	0	-150	0	* AG	0	5.9	.0	10.0
L. De La VinWBL	*	150	2	0	0	* AG	0	5.9	.0	10.0
M. Pueblo StNBA	*	2	-750	2	-150	* AG	171	5.9	.0	10.0
N. Pueblo StNBD	*	2	150	2	750	* AG	146	5.9	.0	10.0
O. Pueblo StSBA	*	-2	750	-2	150	* AG	74	5.9	.0	10.0
P. Pueblo StSBD	*	-2	-150	-2	-750	* AG	120	5.9	.0	10.0
Q. De La VinEBA	*	-750	-2	-150	-2	* AG	858	5.9	.0	10.0
R. De La VinEBD	*	150	-2	750	-2	* AG	837	5.9	.0	10.0
S. De La VinWBA	*	750	0	150	0	* AG	0	5.9	.0	10.0
T. De La VinWBD	*	-150	0	-750	0	* AG	0	5.9	.0	10.0

JOB: Cottage Hospital
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-8	7	1.8
3. SW	*	-8	-8	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	276.	.9	.0	.0	.0	.0	.0	.0	.6	.0
2. NW	96.	.7	.0	.0	.0	.0	.0	.0	.0	.5
3. SW	84.	.9	.0	.0	.0	.0	.0	.0	.0	.6
4. NE	264.	.8	.0	.0	.0	.0	.0	.0	.5	.0
5. ES mdblk	276.	.9	.0	.0	.0	.0	.0	.0	.0	.7
6. WN mdblk	96.	.7	.0	.0	.0	.0	.0	.0	.5	.0
7. WS mdblk	84.	.9	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	264.	.7	.0	.0	.0	.0	.0	.0	.0	.5
9. SE mdblk	354.	.4	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.3	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.4	.1	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	185.	.4	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.7	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.9	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.7	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.3	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	*	2	-150	2	0	* AG	197	5.9	.0	10.0
B. Pueblo StNBD	*	2	0	2	150	* AG	194	5.9	.0	10.0
C. Pueblo StNBL	*	2	-150	0	0	* AG	34	5.9	.0	10.0
D. Pueblo StSBA	*	-2	150	-2	0	* AG	104	5.9	.0	10.0
E. Pueblo StSBD	*	-2	0	-2	-150	* AG	168	5.9	.0	10.0
F. Pueblo StSBL	*	-2	150	0	0	* AG	41	5.9	.0	10.0
G. Bath St.EBA	*	-150	-2	0	-2	* AG	41	5.9	.0	10.0
H. Bath St.EBD	*	0	-2	150	-2	* AG	123	5.9	.0	10.0
I. Bath St.EBL	*	-150	-2	0	0	* AG	32	5.9	.0	10.0
J. Bath St.WBA	*	150	2	0	2	* AG	240	5.9	.0	10.0
K. Bath St.WBD	*	0	2	-150	2	* AG	261	5.9	.0	10.0
L. Bath St.WBL	*	150	2	0	0	* AG	57	5.9	.0	10.0
M. Pueblo StNBA	*	2	-750	2	-150	* AG	231	5.9	.0	10.0
N. Pueblo StNBD	*	2	150	2	750	* AG	194	5.9	.0	10.0
O. Pueblo StSBA	*	-2	750	-2	150	* AG	145	5.9	.0	10.0
P. Pueblo StSBD	*	-2	-150	-2	-750	* AG	168	5.9	.0	10.0
Q. Bath St.EBAX	*	-750	-2	-150	-2	* AG	73	5.9	.0	10.0
R. Bath St.EBDX	*	150	-2	750	-2	* AG	123	5.9	.0	10.0
S. Bath St.WBAX	*	750	2	150	2	* AG	297	5.9	.0	10.0
T. Bath St.WBDX	*	-150	2	-750	2	* AG	261	5.9	.0	10.0

JOB: Cottage Hospital
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-8	8	1.8
3. SW	*	-8	-8	1.8
4. NE	*	8	8	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	8	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	8	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	8	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	8	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.5	.0	.2	.0	.0	.0	.0	.0	.0
2. NW	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	84.	.6	.0	.0	.0	.0	.0	.0	.0	.1
4. NE	186.	.6	.2	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	95.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.4	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.5	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.4	.0	.1	.0	.1	.0	.0	.0	.0
11. SW mdblk	6.	.5	.1	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	185.	.4	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.5	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.4	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	2	-150	2	0	AG	227	5.9	.0	10.0
B. Pueblo StNBD	2	0	2	150	AG	223	5.9	.0	10.0
C. Pueblo StNBL	2	-150	0	0	AG	49	5.9	.0	10.0
D. Pueblo StSBA	-2	150	-2	0	AG	136	5.9	.0	10.0
E. Pueblo StSBD	-2	0	-2	-150	AG	170	5.9	.0	10.0
F. Pueblo StSBL	-2	150	0	0	AG	48	5.9	.0	10.0
G. Castillo EBA	-150	-2	0	-2	AG	139	5.9	.0	10.0
H. Castillo EBD	0	-2	150	-2	AG	240	5.9	.0	10.0
I. Castillo EBL	-150	-2	0	0	AG	36	5.9	.0	10.0
J. Castillo WBA	150	2	0	2	AG	80	5.9	.0	10.0
K. Castillo WBD	0	2	-150	2	AG	143	5.9	.0	10.0
L. Castillo WBL	150	2	0	0	AG	61	5.9	.0	10.0
M. Pueblo StNBA	2	-750	2	-150	AG	276	5.9	.0	10.0
N. Pueblo StNBD	2	150	2	750	AG	223	5.9	.0	10.0
O. Pueblo StSBA	-2	750	-2	150	AG	184	5.9	.0	10.0
P. Pueblo StSBD	-2	-150	-2	-750	AG	170	5.9	.0	10.0
Q. Castillo EBA	-750	-2	-150	-2	AG	175	5.9	.0	10.0
R. Castillo EBD	150	-2	750	-2	AG	240	5.9	.0	10.0
S. Castillo WBA	750	2	150	2	AG	141	5.9	.0	10.0
T. Castillo WBD	-150	2	-750	2	AG	143	5.9	.0	10.0

JOB: Cottage Hospital
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-8	8	1.8
3. SW	*	-8	-8	1.8
4. NE	*	8	8	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	8	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	8	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	8	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	8	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.6	.0	.2	.0	.0	.0	.0	.0	.0
2. NW	174.	.6	.1	.0	.0	.0	.2	.0	.0	.0
3. SW	84.	.6	.0	.0	.0	.0	.0	.0	.0	.2
4. NE	186.	.6	.2	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	95.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.4	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	354.	.5	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.5	.0	.1	.0	.1	.0	.0	.0	.0
11. SW mdblk	6.	.5	.1	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	185.	.5	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.5	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.5	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	*	2	-120	2	0	* AG	275	5.9	.0	10.0
B. Pueblo StNBD	*	2	0	2	150	* AG	253	5.9	.0	10.0
C. Pueblo StNBL	*	2	-120	0	0	* AG	26	5.9	.0	10.0
D. Pueblo StSBA	*	-2	120	-2	0	* AG	156	5.9	.0	10.0
E. Pueblo StSBD	*	-2	0	-2	-150	* AG	170	5.9	.0	10.0
F. Pueblo StSBL	*	-2	120	0	0	* AG	16	5.9	.0	10.0
G. Oak Park EBA	*	-120	-2	0	-2	* AG	21	5.9	.0	10.0
H. Oak Park EBD	*	0	-2	150	-2	* AG	67	5.9	.0	10.0
I. Oak Park EBL	*	-120	-2	0	0	* AG	12	5.9	.0	10.0
J. Oak Park WBA	*	120	2	0	2	* AG	17	5.9	.0	10.0
K. Oak Park WBD	*	0	2	-150	2	* AG	46	5.9	.0	10.0
L. Oak Park WBL	*	120	2	0	0	* AG	13	5.9	.0	10.0
M. Pueblo StNBA	*	2	-750	2	-150	* AG	301	5.9	.0	10.0
N. Pueblo StNBD	*	2	150	2	750	* AG	253	5.9	.0	10.0
O. Pueblo StSBA	*	-2	750	-2	150	* AG	172	5.9	.0	10.0
P. Pueblo StSBD	*	-2	-150	-2	-750	* AG	170	5.9	.0	10.0
Q. Oak Park EBA	*	-750	-2	-150	-2	* AG	33	5.9	.0	10.0
R. Oak Park EBD	*	150	-2	750	-2	* AG	67	5.9	.0	10.0
S. Oak Park WBA	*	750	2	150	2	* AG	30	5.9	.0	10.0
T. Oak Park WBD	*	-150	2	-750	2	* AG	46	5.9	.0	10.0

JOB: Cottage Hospital
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-8	8	1.8
3. SW	*	-8	-8	1.8
4. NE	*	8	8	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	8	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	8	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	8	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	8	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.5	.0	.2	.0	.0	.0	.0	.0	.0
2. NW	174.	.5	.1	.0	.0	.0	.2	.0	.0	.0
3. SW	6.	.4	.0	.1	.0	.1	.0	.0	.0	.0
4. NE	186.	.5	.2	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	275.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	94.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	87.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	186.	.5	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	6.	.4	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.5	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	274.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	94.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	86.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.5	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.5	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.3	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission SNBA	*	4	-150	4	0	*	AG	996	5.9	.0	10.0
B. Mission SNBD	*	4	0	4	150	*	AG	705	5.9	.0	10.0
C. Mission SNBL	*	2	-150	0	0	*	AG	0	5.9	.0	10.0
D. Mission SSBA	*	-4	150	-4	0	*	AG	893	5.9	.0	10.0
E. Mission SSBD	*	-4	0	-4	-150	*	AG	1134	5.9	.0	10.0
F. Mission SSBL	*	-2	150	0	0	*	AG	78	5.9	.0	10.0
G. De La VinEBA	*	-150	-2	0	-2	*	AG	977	5.9	.0	10.0
H. De La VinEBD	*	0	-2	150	-2	*	AG	1175	5.9	.0	10.0
I. De La VinEBL	*	-150	-2	0	0	*	AG	70	5.9	.0	10.0
J. De La VinWBA	*	150	0	0	0	*	AG	0	5.9	.0	10.0
K. De La VinWBD	*	0	0	-150	0	*	AG	0	5.9	.0	10.0
L. De La VinWBL	*	150	2	0	0	*	AG	0	5.9	.0	10.0
M. Mission SNBA	*	4	-750	4	-150	*	AG	996	5.9	.0	10.0
N. Mission SNBD	*	4	150	4	750	*	AG	705	5.9	.0	10.0
O. Mission SSBA	*	-4	750	-4	150	*	AG	971	5.9	.0	10.0
P. Mission SSBD	*	-4	-150	-4	-750	*	AG	1134	5.9	.0	10.0
Q. De La VinEBA	*	-750	-2	-150	-2	*	AG	1047	5.9	.0	10.0
R. De La VinEBD	*	150	-2	750	-2	*	AG	1175	5.9	.0	10.0
S. De La VinWBA	*	750	0	150	0	*	AG	0	5.9	.0	10.0
T. De La VinWBD	*	-150	0	-750	0	*	AG	0	5.9	.0	10.0

JOB: Cottage Hospital
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	10	-8	1.8
2. NW	*	-10	7	1.8
3. SW	*	-10	-8	1.8
4. NE	*	10	7	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	10	-150	1.8
10. NW mdblk	*	-10	150	1.8
11. SW mdblk	*	-10	-150	1.8
12. NE mdblk	*	10	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	10	-600	1.8
18. NW blk	*	-10	600	1.8
19. SW blk	*	-10	-600	1.8
20. NE blk	*	10	600	1.8

JOB: Cottage Hospital
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	1.7	.0	.5	.0	.3	.0	.0	.0	.4
2. NW	173.	1.9	.3	.0	.0	.0	.9	.0	.3	.0
3. SW	84.	1.8	.3	.0	.0	.0	.4	.0	.0	.8
4. NE	187.	1.9	.8	.0	.0	.0	.4	.0	.0	.4
5. ES mdblk	276.	1.3	.0	.0	.0	.0	.0	.0	.1	.9
6. WN mdblk	96.	1.0	.0	.0	.0	.0	.0	.0	.6	.1
7. WS mdblk	84.	1.2	.0	.0	.0	.0	.0	.0	.8	.1
8. EN mdblk	263.	1.0	.0	.0	.0	.0	.0	.0	.0	.7
9. SE mdblk	353.	1.6	.8	.0	.0	.1	.4	.0	.0	.0
10. NW mdblk	174.	1.5	.1	.2	.0	.7	.1	.0	.0	.0
11. SW mdblk	7.	1.7	.3	.0	.0	.0	.9	.0	.0	.0
12. NE mdblk	186.	1.4	.1	.6	.0	.3	.1	.0	.0	.0
13. ES blk	276.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.9	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.4	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
4. NE	*	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0
17. SE blk	*	.0	.0	.0	.0	.9	.0	.0	.6	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.4	.9	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.5	.0	.0	1.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.7	.5	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission SNBA	*	0	-150	0	0	* AG	872	5.9	.0	10.0
B. Mission SNBD	*	0	0	0	150	* AG	968	5.9	.0	10.0
C. Mission SNBL	*	2	-150	0	0	* AG	126	5.9	.0	10.0
D. Mission SSBA	*	-4	150	-4	0	* AG	1069	5.9	.0	10.0
E. Mission SSBD	*	-4	0	-4	-150	* AG	1475	5.9	.0	10.0
F. Mission SSBL	*	-2	150	0	0	* AG	0	5.9	.0	10.0
G. Bath St.EBA	*	-150	-5	0	-5	* AG	175	5.9	.0	10.0
H. Bath St.EBD	*	0	-5	150	-5	* AG	0	5.9	.0	10.0
I. Bath St.EBL	*	-150	-5	0	0	* AG	70	5.9	.0	10.0
J. Bath St.WBA	*	150	7	0	7	* AG	165	5.9	.0	10.0
K. Bath St.WBD	*	0	7	-150	7	* AG	316	5.9	.0	10.0
L. Bath St.WBL	*	150	5	0	0	* AG	282	5.9	.0	10.0
M. Mission SNBA	*	0	-750	0	-150	* AG	998	5.9	.0	10.0
N. Mission SNBD	*	0	150	0	750	* AG	968	5.9	.0	10.0
O. Mission SSBA	*	-4	750	-4	150	* AG	1069	5.9	.0	10.0
P. Mission SSBD	*	-4	-150	-4	-750	* AG	1475	5.9	.0	10.0
Q. Bath St.EBAX	*	-750	-5	-150	-5	* AG	245	5.9	.0	10.0
R. Bath St.EBDX	*	150	-5	750	-5	* AG	0	5.9	.0	10.0
S. Bath St.WBAX	*	750	7	150	7	* AG	447	5.9	.0	10.0
T. Bath St.WBDX	*	-150	7	-750	7	* AG	316	5.9	.0	10.0

JOB: Cottage Hospital
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	7	-12	1.8
2. NW	*	-10	14	1.8
3. SW	*	-10	-12	1.8
4. NE	*	7	14	1.8
5. ES mdblk	*	150	-12	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-12	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	7	-150	1.8
10. NW mdblk	*	-10	150	1.8
11. SW mdblk	*	-10	-150	1.8
12. NE mdblk	*	7	150	1.8
13. ES blk	*	600	-12	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-12	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	7	-600	1.8
18. NW blk	*	-10	600	1.8
19. SW blk	*	-10	-600	1.8
20. NE blk	*	7	600	1.8

JOB: Cottage Hospital
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	187.	1.9	.7	.0	.1	.0	.6	.0	.0	.0
2. NW	174.	2.1	.4	.0	.0	.1	.9	.0	.0	.0
3. SW	173.	2.0	.4	.0	.0	.0	1.1	.0	.0	.0
4. NE	187.	2.0	.6	.1	.1	.0	.7	.0	.0	.0
5. ES mdblk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	97.	.7	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.6	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	264.	.7	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	353.	1.9	.7	.0	.2	.1	.7	.0	.0	.0
10. NW mdblk	174.	1.8	.1	.4	.0	.8	.1	.0	.0	.0
11. SW mdblk	7.	2.0	.4	.1	.0	.0	1.1	.0	.0	.0
12. NE mdblk	186.	1.8	.0	.7	.0	.5	.2	.0	.0	.0
13. ES blk	277.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	1.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	2.1	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.7	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0	.0	.0
2. NW	*	.0	.0	.1	.0	.2	.0	.0	.2	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0
17. SE blk	*	.0	.0	.0	.0	.9	.0	.0	.8	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.6	1.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.6	.0	.0	1.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.9	.7	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: Existing-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission SNBA	*	2	-150	2	0	*	AG	1243	5.9	.0	10.0
B. Mission SNBD	*	2	0	2	150	*	AG	1057	5.9	.0	10.0
C. Mission SNBL	*	2	-150	0	0	*	AG	105	5.9	.0	10.0
D. Mission SSBA	*	-2	150	-2	0	*	AG	1477	5.9	.0	10.0
E. Mission SSBD	*	-2	0	-2	-150	*	AG	1706	5.9	.0	10.0
F. Mission SSBL	*	-2	150	0	0	*	AG	38	5.9	.0	10.0
G. Castillo EBA	*	-150	-4	0	-4	*	AG	374	5.9	.0	10.0
H. Castillo EBD	*	0	-4	150	-4	*	AG	390	5.9	.0	10.0
I. Castillo EBL	*	-150	-2	0	0	*	AG	42	5.9	.0	10.0
J. Castillo WBA	*	150	0	0	0	*	AG	0	5.9	.0	10.0
K. Castillo WBD	*	0	0	-150	0	*	AG	126	5.9	.0	10.0
L. Castillo WBL	*	150	2	0	0	*	AG	0	5.9	.0	10.0
M. Mission SNBA	*	2	-750	2	-150	*	AG	1348	5.9	.0	10.0
N. Mission SNBD	*	2	150	2	750	*	AG	1057	5.9	.0	10.0
O. Mission SSBA	*	-2	750	-2	150	*	AG	1515	5.9	.0	10.0
P. Mission SSBD	*	-2	-150	-2	-750	*	AG	1706	5.9	.0	10.0
Q. Castillo EBA	*	-750	-4	-150	-4	*	AG	416	5.9	.0	10.0
R. Castillo EBD	*	150	-4	750	-4	*	AG	390	5.9	.0	10.0
S. Castillo WBA	*	750	0	150	0	*	AG	0	5.9	.0	10.0
T. Castillo WBD	*	-150	0	-750	0	*	AG	126	5.9	.0	10.0

JOB: Cottage Hospital
RUN: Existing-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-10	1.8
2. NW	*	-8	7	1.8
3. SW	*	-8	-10	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-10	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-10	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-10	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-10	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: Existing-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	187.	2.2	1.0	.0	.0	.0	.7	.0	.0	.0
2. NW	173.	2.5	.6	.0	.0	.0	1.2	.0	.1	.0
3. SW	173.	2.3	.6	.0	.0	.0	1.2	.0	.0	.0
4. NE	187.	2.3	.9	.0	.0	.0	.7	.0	.0	.1
5. ES mdblk	275.	.7	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	97.	.7	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	84.	.7	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	265.	.6	.0	.0	.0	.0	.0	.0	.0	.2
9. SE mdblk	353.	2.3	1.0	.0	.1	.1	.7	.0	.0	.0
10. NW mdblk	174.	2.2	.1	.5	.0	1.1	.1	.0	.0	.0
11. SW mdblk	7.	2.4	.6	.1	.0	.1	1.3	.0	.0	.0
12. NE mdblk	186.	2.1	.1	.8	.0	.6	.2	.0	.0	.0
13. ES blk	275.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.7	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	2.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	2.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	2.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	2.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: Existing-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.2
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
17. SE blk	*	.0	.0	.0	.0	1.2	.0	.0	.9	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.6	1.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.8	.0	.0	1.4	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	1.0	.9	.0	.0	.0	.0	.0

COTTAGE HOSPITAL PROJECT

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

YEAR 2013 NO PROJECT SCENARIO

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Junipero NBA	*	0	-150	0	0	*	AG	89	2.8	.0	10.0
B. Junipero NBD	*	0	0	0	150	*	AG	0	2.8	.0	10.0
C. Junipero NBL	*	2	-150	0	0	*	AG	43	2.8	.0	10.0
D. Junipero SBA	*	0	150	0	0	*	AG	0	2.8	.0	10.0
E. Junipero SBD	*	0	0	0	-150	*	AG	164	2.8	.0	10.0
F. Junipero SBL	*	-2	150	0	0	*	AG	0	2.8	.0	10.0
G. Bath St.EBA	*	-150	-2	0	-2	*	AG	106	2.8	.0	10.0
H. Bath St.EBD	*	0	-2	150	-2	*	AG	149	2.8	.0	10.0
I. Bath St.EBL	*	-150	-2	0	0	*	AG	0	2.8	.0	10.0
J. Bath St.WBA	*	150	2	0	2	*	AG	168	2.8	.0	10.0
K. Bath St.WBD	*	0	2	-150	2	*	AG	211	2.8	.0	10.0
L. Bath St.WBL	*	150	2	0	0	*	AG	118	2.8	.0	10.0
M. Junipero NBA	*	0	-750	0	-150	*	AG	132	2.8	.0	10.0
N. Junipero NBD	*	0	150	0	750	*	AG	0	2.8	.0	10.0
O. Junipero SBA	*	0	750	0	150	*	AG	0	2.8	.0	10.0
P. Junipero SBD	*	0	-150	0	-750	*	AG	164	2.8	.0	10.0
Q. Bath St.EBAX	*	-750	-2	-150	-2	*	AG	106	2.8	.0	10.0
R. Bath St.EBDX	*	150	-2	750	-2	*	AG	149	2.8	.0	10.0
S. Bath St.WBAX	*	750	2	150	2	*	AG	286	2.8	.0	10.0
T. Bath St.WBDX	*	-150	2	-750	2	*	AG	211	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	7	-8	1.8
2. NW	*	-7	8	1.8
3. SW	*	-7	-8	1.8
4. NE	*	7	8	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	8	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	8	1.8
9. SE mdblk	*	7	-150	1.8
10. NW mdblk	*	-7	150	1.8
11. SW mdblk	*	-7	-150	1.8
12. NE mdblk	*	7	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	8	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	8	1.8
17. SE blk	*	7	-600	1.8
18. NW blk	*	-7	600	1.8
19. SW blk	*	-7	-600	1.8
20. NE blk	*	7	600	1.8

JOB: Cottage Hospital
RUN: 2013nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	86.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	178.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	181.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	179.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Junipero NBA	*	2	-150	2	0	* AG	143	2.8	.0	10.0
B. Junipero NBD	*	2	0	2	150	* AG	140	2.8	.0	10.0
C. Junipero NBL	*	2	-150	0	0	* AG	21	2.8	.0	10.0
D. Junipero SBA	*	-2	150	-2	0	* AG	152	2.8	.0	10.0
E. Junipero SBD	*	-2	0	-2	-150	* AG	217	2.8	.0	10.0
F. Junipero SBL	*	-2	150	0	0	* AG	29	2.8	.0	10.0
G. Castillo EBA	*	-150	0	0	0	* AG	106	2.8	.0	10.0
H. Castillo EBD	*	0	0	150	0	* AG	148	2.8	.0	10.0
I. Castillo EBL	*	-150	-2	0	0	* AG	17	2.8	.0	10.0
J. Castillo WBA	*	150	0	0	0	* AG	55	2.8	.0	10.0
K. Castillo WBD	*	0	0	-150	0	* AG	60	2.8	.0	10.0
L. Castillo WBL	*	150	2	0	0	* AG	42	2.8	.0	10.0
M. Junipero NBA	*	2	-750	2	-150	* AG	164	2.8	.0	10.0
N. Junipero NBD	*	2	150	2	750	* AG	140	2.8	.0	10.0
O. Junipero SBA	*	-2	750	-2	150	* AG	181	2.8	.0	10.0
P. Junipero SBD	*	-2	-150	-2	-750	* AG	217	2.8	.0	10.0
Q. Castillo EBA	*	-750	0	-150	0	* AG	123	2.8	.0	10.0
R. Castillo EBD	*	150	0	750	0	* AG	148	2.8	.0	10.0
S. Castillo WBA	*	750	0	150	0	* AG	97	2.8	.0	10.0
T. Castillo WBD	*	-150	0	-750	0	* AG	60	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-7	1.8
2. NW	*	-8	7	1.8
3. SW	*	-8	-7	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-7	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-7	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-7	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-7	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	275.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	86.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Junipero NBA	*	2	-150	2	0	* AG	177	2.8	.0	10.0
B. Junipero NBD	*	2	0	2	150	* AG	169	2.8	.0	10.0
C. Junipero NBL	*	2	-150	0	0	* AG	0	2.8	.0	10.0
D. Junipero SBA	*	-2	150	-2	0	* AG	231	2.8	.0	10.0
E. Junipero SBD	*	-2	0	-2	-150	* AG	259	2.8	.0	10.0
F. Junipero SBL	*	-2	150	0	0	* AG	10	2.8	.0	10.0
G. Oak Park EBA	*	-150	0	0	0	* AG	0	2.8	.0	10.0
H. Oak Park EBD	*	0	0	150	0	* AG	33	2.8	.0	10.0
I. Oak Park EBL	*	-150	-2	0	0	* AG	0	2.8	.0	10.0
J. Oak Park WBA	*	150	0	0	0	* AG	15	2.8	.0	10.0
K. Oak Park WBD	*	0	0	-150	0	* AG	0	2.8	.0	10.0
L. Oak Park WBL	*	150	2	0	0	* AG	28	2.8	.0	10.0
M. Junipero NBA	*	2	-750	2	-150	* AG	177	2.8	.0	10.0
N. Junipero NBD	*	2	150	2	750	* AG	169	2.8	.0	10.0
O. Junipero SBA	*	-2	750	-2	150	* AG	241	2.8	.0	10.0
P. Junipero SBD	*	-2	-150	-2	-750	* AG	259	2.8	.0	10.0
Q. Oak Park EBA	*	-750	0	-150	0	* AG	0	2.8	.0	10.0
R. Oak Park EBD	*	150	0	750	0	* AG	33	2.8	.0	10.0
S. Oak Park WBA	*	750	0	150	0	* AG	43	2.8	.0	10.0
T. Oak Park WBD	*	-150	0	-750	0	* AG	0	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-7	1.8
2. NW	*	-8	7	1.8
3. SW	*	-8	-7	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-7	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-7	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-7	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-7	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	174.	.2	.0	.0	.0	.0	.1	.0	.0	.0
3. SW	174.	.2	.0	.0	.0	.0	.1	.0	.0	.0
4. NE	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	89.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	263.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	274.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	90.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Nogales ANBA	*	2	-150	2	0	*	AG	73	2.8	.0	10.0
B. Nogales ANBD	*	2	0	2	150	*	AG	0	2.8	.0	10.0
C. Nogales ANBL	*	2	-150	0	0	*	AG	0	2.8	.0	10.0
D. Nogales ASBA	*	0	150	0	0	*	AG	0	2.8	.0	10.0
E. Nogales ASBD	*	0	0	0	-150	*	AG	32	2.8	.0	10.0
F. Nogales ASBL	*	-2	150	0	0	*	AG	0	2.8	.0	10.0
G. De La VinEBA	*	-150	-4	0	-4	*	AG	899	2.8	.0	10.0
H. De La VinEBD	*	0	-4	150	-4	*	AG	940	2.8	.0	10.0
I. De La VinEBL	*	-150	-2	0	0	*	AG	0	2.8	.0	10.0
J. De La VinWBA	*	150	0	0	0	*	AG	0	2.8	.0	10.0
K. De La VinWBD	*	0	0	-150	0	*	AG	0	2.8	.0	10.0
L. De La VinWBL	*	150	2	0	0	*	AG	0	2.8	.0	10.0
M. Nogales ANBA	*	2	-750	2	-150	*	AG	73	2.8	.0	10.0
N. Nogales ANBD	*	2	150	2	750	*	AG	0	2.8	.0	10.0
O. Nogales ASBA	*	0	750	0	150	*	AG	0	2.8	.0	10.0
P. Nogales ASBD	*	0	-150	0	-750	*	AG	32	2.8	.0	10.0
Q. De La VinEBA	*	-750	-4	-150	-4	*	AG	899	2.8	.0	10.0
R. De La VinEBD	*	150	-4	750	-4	*	AG	940	2.8	.0	10.0
S. De La VinWBA	*	750	0	150	0	*	AG	0	2.8	.0	10.0
T. De La VinWBD	*	-150	0	-750	0	*	AG	0	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-10	1.8
2. NW	*	-7	7	1.8
3. SW	*	-7	-10	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-10	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-10	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-7	150	1.8
11. SW mdblk	*	-7	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-10	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-10	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-7	600	1.8
19. SW blk	*	-7	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	84.	.4	.0	.0	.0	.0	.0	.0	.0	.3
2. NW	96.	.3	.0	.0	.0	.0	.0	.0	.0	.2
3. SW	84.	.4	.0	.0	.0	.0	.0	.0	.0	.3
4. NE	96.	.3	.0	.0	.0	.0	.0	.0	.0	.2
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	96.	.3	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	84.	.4	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.2
9. SE mdblk	351.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	178.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	181.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	179.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	*	2	-150	2	0	* AG	186	3.1	.0	10.0
B. Pueblo StNBD	*	2	0	2	150	* AG	162	3.1	.0	10.0
C. Pueblo StNBL	*	2	-150	0	0	* AG	0	3.1	.0	10.0
D. Pueblo StSBA	*	-2	150	-2	0	* AG	63	3.1	.0	10.0
E. Pueblo StSBD	*	-2	0	-2	-150	* AG	131	3.1	.0	10.0
F. Pueblo StSBL	*	-2	150	0	0	* AG	17	3.1	.0	10.0
G. De La VinEBA	*	-150	-2	0	-2	* AG	889	3.1	.0	10.0
H. De La VinEBD	*	0	-2	150	-2	* AG	922	3.1	.0	10.0
I. De La VinEBL	*	-150	-2	0	0	* AG	60	3.1	.0	10.0
J. De La VinWBA	*	150	0	0	0	* AG	0	3.1	.0	10.0
K. De La VinWBD	*	0	0	-150	0	* AG	0	3.1	.0	10.0
L. De La VinWBL	*	150	2	0	0	* AG	0	3.1	.0	10.0
M. Pueblo StNBA	*	2	-750	2	-150	* AG	186	3.1	.0	10.0
N. Pueblo StNBD	*	2	150	2	750	* AG	162	3.1	.0	10.0
O. Pueblo StSBA	*	-2	750	-2	150	* AG	80	3.1	.0	10.0
P. Pueblo StSBD	*	-2	-150	-2	-750	* AG	131	3.1	.0	10.0
Q. De La VinEBA	*	-750	-2	-150	-2	* AG	949	3.1	.0	10.0
R. De La VinEBD	*	150	-2	750	-2	* AG	922	3.1	.0	10.0
S. De La VinWBA	*	750	0	150	0	* AG	0	3.1	.0	10.0
T. De La VinWBD	*	-150	0	-750	0	* AG	0	3.1	.0	10.0

JOB: Cottage Hospital
RUN: 2013nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-8	7	1.8
3. SW	*	-8	-8	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	276.	.5	.0	.0	.0	.0	.0	.0	.3	.0
2. NW	96.	.4	.0	.0	.0	.0	.0	.0	.0	.3
3. SW	84.	.5	.0	.0	.0	.0	.0	.0	.0	.4
4. NE	264.	.4	.0	.0	.0	.0	.0	.0	.3	.0
5. ES mdblk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	96.	.4	.0	.0	.0	.0	.0	.0	.3	.0
7. WS mdblk	84.	.5	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.3
9. SE mdblk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
17. SE blk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	*	2	-150	2	0	* AG	214	2.8	.0	10.0
B. Pueblo StNBD	*	2	0	2	150	* AG	211	2.8	.0	10.0
C. Pueblo StNBL	*	2	-150	0	0	* AG	37	2.8	.0	10.0
D. Pueblo StSBA	*	-2	150	-2	0	* AG	113	2.8	.0	10.0
E. Pueblo StSBD	*	-2	0	-2	-150	* AG	183	2.8	.0	10.0
F. Pueblo StSBL	*	-2	150	0	0	* AG	45	2.8	.0	10.0
G. Bath St.EBA	*	-150	-2	0	-2	* AG	45	2.8	.0	10.0
H. Bath St.EBD	*	0	-2	150	-2	* AG	134	2.8	.0	10.0
I. Bath St.EBL	*	-150	-2	0	0	* AG	35	2.8	.0	10.0
J. Bath St.WBA	*	150	2	0	2	* AG	261	2.8	.0	10.0
K. Bath St.WBD	*	0	2	-150	2	* AG	284	2.8	.0	10.0
L. Bath St.WBL	*	150	2	0	0	* AG	62	2.8	.0	10.0
M. Pueblo StNBA	*	2	-750	2	-150	* AG	251	2.8	.0	10.0
N. Pueblo StNBD	*	2	150	2	750	* AG	211	2.8	.0	10.0
O. Pueblo StSBA	*	-2	750	-2	150	* AG	158	2.8	.0	10.0
P. Pueblo StSBD	*	-2	-150	-2	-750	* AG	183	2.8	.0	10.0
Q. Bath St.EBAX	*	-750	-2	-150	-2	* AG	80	2.8	.0	10.0
R. Bath St.EBDX	*	150	-2	750	-2	* AG	134	2.8	.0	10.0
S. Bath St.WBAX	*	750	2	150	2	* AG	323	2.8	.0	10.0
T. Bath St.WBDX	*	-150	2	-750	2	* AG	284	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-8	8	1.8
3. SW	*	-8	-8	1.8
4. NE	*	8	8	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	8	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	8	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	8	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	8	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	*	2	-150	2	0	*	AG	248	2.8	.0	10.0
B. Pueblo StNBD	*	2	0	2	150	*	AG	240	2.8	.0	10.0
C. Pueblo StNBL	*	2	-150	0	0	*	AG	49	2.8	.0	10.0
D. Pueblo StSBA	*	-2	150	-2	0	*	AG	145	2.8	.0	10.0
E. Pueblo StSBD	*	-2	0	-2	-150	*	AG	184	2.8	.0	10.0
F. Pueblo StSBL	*	-2	150	0	0	*	AG	52	2.8	.0	10.0
G. Castillo EBA	*	-150	0	0	0	*	AG	139	2.8	.0	10.0
H. Castillo EBD	*	0	0	150	0	*	AG	250	2.8	.0	10.0
I. Castillo EBL	*	-150	-2	0	0	*	AG	36	2.8	.0	10.0
J. Castillo WBA	*	150	0	0	0	*	AG	82	2.8	.0	10.0
K. Castillo WBD	*	0	0	-150	0	*	AG	143	2.8	.0	10.0
L. Castillo WBL	*	150	2	0	0	*	AG	66	2.8	.0	10.0
M. Pueblo StNBA	*	2	-750	2	-150	*	AG	297	2.8	.0	10.0
N. Pueblo StNBD	*	2	150	2	750	*	AG	240	2.8	.0	10.0
O. Pueblo StSBA	*	-2	750	-2	150	*	AG	197	2.8	.0	10.0
P. Pueblo StSBD	*	-2	-150	-2	-750	*	AG	184	2.8	.0	10.0
Q. Castillo EBA	*	-750	0	-150	0	*	AG	175	2.8	.0	10.0
R. Castillo EBD	*	150	0	750	0	*	AG	250	2.8	.0	10.0
S. Castillo WBA	*	750	0	150	0	*	AG	148	2.8	.0	10.0
T. Castillo WBD	*	-150	0	-750	0	*	AG	143	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-7	1.8
2. NW	*	-8	7	1.8
3. SW	*	-8	-7	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-7	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-7	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-7	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-7	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	95.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	85.	.3	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	186.	.3	.1	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	265.	.3	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	354.	.3	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
17. SE blk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	*	2	-120	2	0	*	AG	300	2.8	.0	10.0
B. Pueblo StNBD	*	2	0	2	150	*	AG	276	2.8	.0	10.0
C. Pueblo StNBL	*	2	-120	0	0	*	AG	28	2.8	.0	10.0
D. Pueblo StSBA	*	-2	120	-2	0	*	AG	170	2.8	.0	10.0
E. Pueblo StSBD	*	-2	0	-2	-150	*	AG	185	2.8	.0	10.0
F. Pueblo StSBL	*	-2	120	0	0	*	AG	17	2.8	.0	10.0
G. Oak Park EBA	*	-120	-2	0	-2	*	AG	23	2.8	.0	10.0
H. Oak Park EBD	*	0	-2	150	-2	*	AG	73	2.8	.0	10.0
I. Oak Park EBL	*	-120	-2	0	0	*	AG	13	2.8	.0	10.0
J. Oak Park WBA	*	120	2	0	2	*	AG	19	2.8	.0	10.0
K. Oak Park WBD	*	0	2	-150	2	*	AG	50	2.8	.0	10.0
L. Oak Park WBL	*	120	2	0	0	*	AG	14	2.8	.0	10.0
M. Pueblo StNBA	*	2	-750	2	-150	*	AG	328	2.8	.0	10.0
N. Pueblo StNBD	*	2	150	2	750	*	AG	276	2.8	.0	10.0
O. Pueblo StSBA	*	-2	750	-2	150	*	AG	187	2.8	.0	10.0
P. Pueblo StSBD	*	-2	-150	-2	-750	*	AG	185	2.8	.0	10.0
Q. Oak Park EBA	*	-750	-2	-150	-2	*	AG	36	2.8	.0	10.0
R. Oak Park EBD	*	150	-2	750	-2	*	AG	73	2.8	.0	10.0
S. Oak Park WBA	*	750	2	150	2	*	AG	33	2.8	.0	10.0
T. Oak Park WBD	*	-150	2	-750	2	*	AG	50	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-8	8	1.8
3. SW	*	-8	-8	1.8
4. NE	*	8	8	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	8	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	8	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	8	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	8	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.2	.0	.1	.0	.0	.0	.0	.0	.0
2. NW	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	186.	.3	.1	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	275.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	95.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	87.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	265.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.2	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	274.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	94.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	86.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission SNBA	*	4	-150	4	0	* AG	1099	3.1	.0	10.0
B. Mission SNBD	*	4	0	4	150	* AG	780	3.1	.0	10.0
C. Mission SNBL	*	2	-150	0	0	* AG	0	3.1	.0	10.0
D. Mission SSBA	*	-4	150	-4	0	* AG	991	3.1	.0	10.0
E. Mission SSBD	*	-4	0	-4	-150	* AG	1254	3.1	.0	10.0
F. Mission SSBL	*	-2	150	0	0	* AG	85	3.1	.0	10.0
G. De La VinEBA	*	-150	-2	0	-2	* AG	1075	3.1	.0	10.0
H. De La VinEBD	*	0	-2	150	-2	* AG	1292	3.1	.0	10.0
I. De La VinEBL	*	-150	-2	0	0	* AG	76	3.1	.0	10.0
J. De La VinWBA	*	150	0	0	0	* AG	0	3.1	.0	10.0
K. De La VinWBD	*	0	0	-150	0	* AG	0	3.1	.0	10.0
L. De La VinWBL	*	150	2	0	0	* AG	0	3.1	.0	10.0
M. Mission SNBA	*	4	-750	4	-150	* AG	1099	3.1	.0	10.0
N. Mission SNBD	*	4	150	4	750	* AG	780	3.1	.0	10.0
O. Mission SSBA	*	-4	750	-4	150	* AG	1076	3.1	.0	10.0
P. Mission SSBD	*	-4	-150	-4	-750	* AG	1254	3.1	.0	10.0
Q. De La VinEBA	*	-750	-2	-150	-2	* AG	1151	3.1	.0	10.0
R. De La VinEBD	*	150	-2	750	-2	* AG	1292	3.1	.0	10.0
S. De La VinWBA	*	750	0	150	0	* AG	0	3.1	.0	10.0
T. De La VinWBD	*	-150	0	-750	0	* AG	0	3.1	.0	10.0

JOB: Cottage Hospital
RUN: 2013nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	10	-8	1.8
2. NW	*	-10	7	1.8
3. SW	*	-10	-8	1.8
4. NE	*	10	7	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	10	-150	1.8
10. NW mdblk	*	-10	150	1.8
11. SW mdblk	*	-10	-150	1.8
12. NE mdblk	*	10	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	10	-600	1.8
18. NW blk	*	-10	600	1.8
19. SW blk	*	-10	-600	1.8
20. NE blk	*	10	600	1.8

JOB: Cottage Hospital
RUN: 2013nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	1.0	.0	.3	.0	.2	.0	.0	.0	.3
2. NW	173.	1.1	.2	.0	.0	.0	.5	.0	.2	.0
3. SW	84.	1.0	.1	.0	.0	.0	.2	.0	.0	.5
4. NE	187.	1.1	.4	.0	.0	.0	.2	.0	.0	.2
5. ES mdblk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	96.	.6	.0	.0	.0	.0	.0	.0	.3	.0
7. WS mdblk	84.	.7	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.4
9. SE mdblk	353.	.9	.4	.0	.0	.0	.2	.0	.0	.0
10. NW mdblk	174.	.9	.0	.1	.0	.4	.0	.0	.0	.0
11. SW mdblk	7.	.9	.2	.0	.0	.0	.5	.0	.0	.0
12. NE mdblk	186.	.8	.0	.3	.0	.2	.0	.0	.0	.0
13. ES blk	276.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.8	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0
17. SE blk	*	.0	.0	.0	.0	.5	.0	.0	.3	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.5	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.3	.0	.0	.6	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.4	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission SNBA	*	0	-150	0	0	* AG	963	3.1	.0	10.0
B. Mission SNBD	*	0	0	0	150	* AG	1067	3.1	.0	10.0
C. Mission SNBL	*	2	-150	0	0	* AG	137	3.1	.0	10.0
D. Mission SSBA	*	-4	150	-4	0	* AG	1184	3.1	.0	10.0
E. Mission SSBD	*	-4	0	-4	-150	* AG	1628	3.1	.0	10.0
F. Mission SSBL	*	-2	150	0	0	* AG	0	3.1	.0	10.0
G. Bath St.EBA	*	-150	-5	0	-5	* AG	191	3.1	.0	10.0
H. Bath St.EBD	*	0	-5	150	-5	* AG	0	3.1	.0	10.0
I. Bath St.EBL	*	-150	-5	0	0	* AG	76	3.1	.0	10.0
J. Bath St.WBA	*	150	7	0	7	* AG	180	3.1	.0	10.0
K. Bath St.WBD	*	0	7	-150	7	* AG	345	3.1	.0	10.0
L. Bath St.WBL	*	150	5	0	0	* AG	309	3.1	.0	10.0
M. Mission SNBA	*	0	-750	0	-150	* AG	1100	3.1	.0	10.0
N. Mission SNBD	*	0	150	0	750	* AG	1067	3.1	.0	10.0
O. Mission SSBA	*	-4	750	-4	150	* AG	1184	3.1	.0	10.0
P. Mission SSBD	*	-4	-150	-4	-750	* AG	1628	3.1	.0	10.0
Q. Bath St.EBAX	*	-750	-5	-150	-5	* AG	267	3.1	.0	10.0
R. Bath St.EBDX	*	150	-5	750	-5	* AG	0	3.1	.0	10.0
S. Bath St.WBAX	*	750	7	150	7	* AG	489	3.1	.0	10.0
T. Bath St.WBDX	*	-150	7	-750	7	* AG	345	3.1	.0	10.0

JOB: Cottage Hospital
RUN: 2013nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	7	-12	1.8
2. NW	*	-10	14	1.8
3. SW	*	-10	-12	1.8
4. NE	*	7	14	1.8
5. ES mdblk	*	150	-12	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-12	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	7	-150	1.8
10. NW mdblk	*	-10	150	1.8
11. SW mdblk	*	-10	-150	1.8
12. NE mdblk	*	7	150	1.8
13. ES blk	*	600	-12	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-12	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	7	-600	1.8
18. NW blk	*	-10	600	1.8
19. SW blk	*	-10	-600	1.8
20. NE blk	*	7	600	1.8

JOB: Cottage Hospital
RUN: 2013nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	187.	1.1	.4	.0	.0	.0	.4	.0	.0	.0
2. NW	174.	1.2	.2	.0	.0	.0	.5	.0	.0	.0
3. SW	173.	1.1	.2	.0	.0	.0	.6	.0	.0	.0
4. NE	187.	1.1	.3	.0	.0	.0	.4	.0	.0	.0
5. ES mdblk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.4	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	353.	1.1	.4	.0	.0	.0	.4	.0	.0	.0
10. NW mdblk	174.	1.0	.0	.2	.0	.5	.0	.0	.0	.0
11. SW mdblk	7.	1.1	.2	.0	.0	.0	.6	.0	.0	.0
12. NE mdblk	186.	1.0	.0	.4	.0	.3	.0	.0	.0	.0
13. ES blk	277.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0
17. SE blk	*	.0	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.3	.5	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.3	.0	.0	.7	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.5	.4	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission SNBA	*	2	-150	2	0	*	AG	1370	3.1	.0	10.0
B. Mission SNBD	*	2	0	2	150	*	AG	1165	3.1	.0	10.0
C. Mission SNBL	*	2	-150	0	0	*	AG	114	3.1	.0	10.0
D. Mission SSBA	*	-2	150	-2	0	*	AG	1629	3.1	.0	10.0
E. Mission SSBD	*	-2	0	-2	-150	*	AG	1879	3.1	.0	10.0
F. Mission SSBL	*	-2	150	0	0	*	AG	41	3.1	.0	10.0
G. Castillo EBA	*	-150	-4	0	-4	*	AG	408	3.1	.0	10.0
H. Castillo EBD	*	0	-4	150	-4	*	AG	427	3.1	.0	10.0
I. Castillo EBL	*	-150	-2	0	0	*	AG	46	3.1	.0	10.0
J. Castillo WBA	*	150	0	0	0	*	AG	0	3.1	.0	10.0
K. Castillo WBD	*	0	0	-150	0	*	AG	137	3.1	.0	10.0
L. Castillo WBL	*	150	2	0	0	*	AG	0	3.1	.0	10.0
M. Mission SNBA	*	2	-750	2	-150	*	AG	1484	3.1	.0	10.0
N. Mission SNBD	*	2	150	2	750	*	AG	1165	3.1	.0	10.0
O. Mission SSBA	*	-2	750	-2	150	*	AG	1670	3.1	.0	10.0
P. Mission SSBD	*	-2	-150	-2	-750	*	AG	1879	3.1	.0	10.0
Q. Castillo EBA	*	-750	-4	-150	-4	*	AG	454	3.1	.0	10.0
R. Castillo EBD	*	150	-4	750	-4	*	AG	427	3.1	.0	10.0
S. Castillo WBA	*	750	0	150	0	*	AG	0	3.1	.0	10.0
T. Castillo WBD	*	-150	0	-750	0	*	AG	137	3.1	.0	10.0

JOB: Cottage Hospital
RUN: 2013nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-10	1.8
2. NW	-8	7	1.8
3. SW	-8	-10	1.8
4. NE	8	7	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	7	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

JOB: Cottage Hospital
RUN: 2013nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	187.	1.2	.5	.0	.0	.0	.4	.0	.0	.0
2. NW	173.	1.4	.3	.0	.0	.0	.7	.0	.0	.0
3. SW	173.	1.3	.3	.0	.0	.0	.7	.0	.0	.0
4. NE	187.	1.3	.5	.0	.0	.0	.4	.0	.0	.0
5. ES mdblk	275.	.4	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	98.	.4	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	84.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	265.	.3	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	353.	1.3	.5	.0	.0	.0	.4	.0	.0	.0
10. NW mdblk	174.	1.2	.0	.3	.0	.6	.0	.0	.0	.0
11. SW mdblk	7.	1.3	.3	.0	.0	.0	.7	.0	.0	.0
12. NE mdblk	186.	1.2	.0	.5	.0	.3	.0	.0	.0	.0
13. ES blk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.1	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
17. SE blk	*	.0	.0	.0	.0	.7	.0	.0	.5	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.4	.7	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.4	.0	.0	.8	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.5	.5	.0	.0	.0	.0	.0

COTTAGE HOSPITAL PROJECT

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

YEAR 2013 WITH PROJECT SCENARIO

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Junipero NBA	*	0	-150	0	0	*	AG	125	2.8	.0	10.0
B. Junipero NBD	*	0	0	0	150	*	AG	0	2.8	.0	10.0
C. Junipero NBL	*	2	-150	0	0	*	AG	47	2.8	.0	10.0
D. Junipero SBA	*	0	150	0	0	*	AG	0	2.8	.0	10.0
E. Junipero SBD	*	0	0	0	-150	*	AG	280	2.8	.0	10.0
F. Junipero SBL	*	-2	150	0	0	*	AG	0	2.8	.0	10.0
G. Bath St.EBA	*	-150	-2	0	-2	*	AG	180	2.8	.0	10.0
H. Bath St.EBD	*	0	-2	150	-2	*	AG	236	2.8	.0	10.0
I. Bath St.EBL	*	-150	-2	0	0	*	AG	0	2.8	.0	10.0
J. Bath St.WBA	*	150	2	0	2	*	AG	181	2.8	.0	10.0
K. Bath St.WBD	*	0	2	-150	2	*	AG	228	2.8	.0	10.0
L. Bath St.WBL	*	150	2	0	0	*	AG	211	2.8	.0	10.0
M. Junipero NBA	*	0	-750	0	-150	*	AG	172	2.8	.0	10.0
N. Junipero NBD	*	0	150	0	750	*	AG	0	2.8	.0	10.0
O. Junipero SBA	*	0	750	0	150	*	AG	0	2.8	.0	10.0
P. Junipero SBD	*	0	-150	0	-750	*	AG	280	2.8	.0	10.0
Q. Bath St.EBAX	*	-750	-2	-150	-2	*	AG	180	2.8	.0	10.0
R. Bath St.EBDX	*	150	-2	750	-2	*	AG	236	2.8	.0	10.0
S. Bath St.WBAX	*	750	2	150	2	*	AG	392	2.8	.0	10.0
T. Bath St.WBDX	*	-150	2	-750	2	*	AG	228	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	7	-8	1.8
2. NW	*	-7	8	1.8
3. SW	*	-7	-8	1.8
4. NE	*	7	8	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	8	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	8	1.8
9. SE mdblk	*	7	-150	1.8
10. NW mdblk	*	-7	150	1.8
11. SW mdblk	*	-7	-150	1.8
12. NE mdblk	*	7	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	8	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	8	1.8
17. SE blk	*	7	-600	1.8
18. NW blk	*	-7	600	1.8
19. SW blk	*	-7	-600	1.8
20. NE blk	*	7	600	1.8

JOB: Cottage Hospital
RUN: 2013wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	175.	.3	.0	.0	.0	.0	.1	.0	.0	.0
3. SW	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	185.	.3	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	86.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.2	.0	.0	.0	.0	.1	.0	.0	.0
10. NW mdblk	178.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.2	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	181.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	179.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Junipero NBA	*	2	-150	2	0	* AG	96	2.8	.0	10.0
B. Junipero NBD	*	2	0	2	150	* AG	153	2.8	.0	10.0
C. Junipero NBL	*	2	-150	0	0	* AG	93	2.8	.0	10.0
D. Junipero SBA	*	-2	150	-2	0	* AG	268	2.8	.0	10.0
E. Junipero SBD	*	-2	0	-2	-150	* AG	231	2.8	.0	10.0
F. Junipero SBL	*	-2	150	0	0	* AG	0	2.8	.0	10.0
G. Castillo EBA	*	-150	0	0	0	* AG	72	2.8	.0	10.0
H. Castillo EBD	*	0	0	150	0	* AG	0	2.8	.0	10.0
I. Castillo EBL	*	-150	-2	0	0	* AG	57	2.8	.0	10.0
J. Castillo WBA	*	150	0	0	0	* AG	0	2.8	.0	10.0
K. Castillo WBD	*	0	0	-150	0	* AG	202	2.8	.0	10.0
L. Castillo WBL	*	150	2	0	0	* AG	0	2.8	.0	10.0
M. Junipero NBA	*	2	-750	2	-150	* AG	189	2.8	.0	10.0
N. Junipero NBD	*	2	150	2	750	* AG	153	2.8	.0	10.0
O. Junipero SBA	*	-2	750	-2	150	* AG	268	2.8	.0	10.0
P. Junipero SBD	*	-2	-150	-2	-750	* AG	231	2.8	.0	10.0
Q. Castillo EBA	*	-750	0	-150	0	* AG	129	2.8	.0	10.0
R. Castillo EBD	*	150	0	750	0	* AG	0	2.8	.0	10.0
S. Castillo WBA	*	750	0	150	0	* AG	0	2.8	.0	10.0
T. Castillo WBD	*	-150	0	-750	0	* AG	202	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-7	1.8
2. NW	-8	7	1.8
3. SW	-8	-7	1.8
4. NE	8	7	1.8
5. ES mdblk	150	-7	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-7	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-7	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-7	1.8
16. EN blk	600	7	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

JOB: Cottage Hospital
RUN: 2013wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	6.	.3	.0	.0	.0	.1	.0	.0	.0	.0
4. NE	265.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	271.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	99.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	269.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.2	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	270.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	269.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Junipero NBA	*	2	-150	2	0	* AG	224	2.8	.0	10.0
B. Junipero NBD	*	2	0	2	150	* AG	241	2.8	.0	10.0
C. Junipero NBL	*	2	-150	0	0	* AG	0	2.8	.0	10.0
D. Junipero SBA	*	-2	150	-2	0	* AG	249	2.8	.0	10.0
E. Junipero SBD	*	-2	0	-2	-150	* AG	277	2.8	.0	10.0
F. Junipero SBL	*	-2	150	0	0	* AG	48	2.8	.0	10.0
G. Oak Park EBA	*	-150	0	0	0	* AG	0	2.8	.0	10.0
H. Oak Park EBD	*	0	0	150	0	* AG	118	2.8	.0	10.0
I. Oak Park EBL	*	-150	-2	0	0	* AG	0	2.8	.0	10.0
J. Oak Park WBA	*	150	0	0	0	* AG	87	2.8	.0	10.0
K. Oak Park WBD	*	0	0	-150	0	* AG	0	2.8	.0	10.0
L. Oak Park WBL	*	150	2	0	0	* AG	28	2.8	.0	10.0
M. Junipero NBA	*	2	-750	2	-150	* AG	224	2.8	.0	10.0
N. Junipero NBD	*	2	150	2	750	* AG	241	2.8	.0	10.0
O. Junipero SBA	*	-2	750	-2	150	* AG	297	2.8	.0	10.0
P. Junipero SBD	*	-2	-150	-2	-750	* AG	277	2.8	.0	10.0
Q. Oak Park EBA	*	-750	0	-150	0	* AG	0	2.8	.0	10.0
R. Oak Park EBD	*	150	0	750	0	* AG	118	2.8	.0	10.0
S. Oak Park WBA	*	750	0	150	0	* AG	115	2.8	.0	10.0
T. Oak Park WBD	*	-150	0	-750	0	* AG	0	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-7	1.8
2. NW	-8	7	1.8
3. SW	-8	-7	1.8
4. NE	8	7	1.8
5. ES mdblk	150	-7	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-7	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-7	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-7	1.8
16. EN blk	600	7	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

JOB: Cottage Hospital
RUN: 2013wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	6.	.3	.0	.0	.0	.1	.0	.0	.0	.0
3. SW	6.	.3	.0	.0	.0	.1	.0	.0	.0	.0
4. NE	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	279.	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	89.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.3	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	6.	.3	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	186.	.3	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	90.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	89.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.3	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Nogales ANBA	*	2	-150	2	0	*	AG	73	2.8	.0	10.0
B. Nogales ANBD	*	2	0	2	150	*	AG	0	2.8	.0	10.0
C. Nogales ANBL	*	2	-150	0	0	*	AG	0	2.8	.0	10.0
D. Nogales ASBA	*	0	150	0	0	*	AG	0	2.8	.0	10.0
E. Nogales ASBD	*	0	0	0	-150	*	AG	32	2.8	.0	10.0
F. Nogales ASBL	*	-2	150	0	0	*	AG	0	2.8	.0	10.0
G. De La VinEBA	*	-150	-4	0	-4	*	AG	900	2.8	.0	10.0
H. De La VinEBD	*	0	-4	150	-4	*	AG	941	2.8	.0	10.0
I. De La VinEBL	*	-150	-2	0	0	*	AG	0	2.8	.0	10.0
J. De La VinWBA	*	150	0	0	0	*	AG	0	2.8	.0	10.0
K. De La VinWBD	*	0	0	-150	0	*	AG	0	2.8	.0	10.0
L. De La VinWBL	*	150	2	0	0	*	AG	0	2.8	.0	10.0
M. Nogales ANBA	*	2	-750	2	-150	*	AG	73	2.8	.0	10.0
N. Nogales ANBD	*	2	150	2	750	*	AG	0	2.8	.0	10.0
O. Nogales ASBA	*	0	750	0	150	*	AG	0	2.8	.0	10.0
P. Nogales ASBD	*	0	-150	0	-750	*	AG	32	2.8	.0	10.0
Q. De La VinEBA	*	-750	-4	-150	-4	*	AG	900	2.8	.0	10.0
R. De La VinEBD	*	150	-4	750	-4	*	AG	941	2.8	.0	10.0
S. De La VinWBA	*	750	0	150	0	*	AG	0	2.8	.0	10.0
T. De La VinWBD	*	-150	0	-750	0	*	AG	0	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-10	1.8
2. NW	*	-7	7	1.8
3. SW	*	-7	-10	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-10	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-10	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-7	150	1.8
11. SW mdblk	*	-7	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-10	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-10	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-7	600	1.8
19. SW blk	*	-7	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	84.	.4	.0	.0	.0	.0	.0	.0	.0	.3
2. NW	96.	.3	.0	.0	.0	.0	.0	.0	.0	.2
3. SW	84.	.4	.0	.0	.0	.0	.0	.0	.0	.3
4. NE	96.	.3	.0	.0	.0	.0	.0	.0	.0	.2
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	96.	.3	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	84.	.4	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.2
9. SE mdblk	351.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	178.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	181.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	179.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	*	2	-150	2	0	*	AG	190	3.1	.0	10.0
B. Pueblo StNBD	*	2	0	2	150	*	AG	166	3.1	.0	10.0
C. Pueblo StNBL	*	2	-150	0	0	*	AG	0	3.1	.0	10.0
D. Pueblo StSBA	*	-2	150	-2	0	*	AG	64	3.1	.0	10.0
E. Pueblo StSBD	*	-2	0	-2	-150	*	AG	133	3.1	.0	10.0
F. Pueblo StSBL	*	-2	150	0	0	*	AG	17	3.1	.0	10.0
G. De La VinEBA	*	-150	-2	0	-2	*	AG	890	3.1	.0	10.0
H. De La VinEBD	*	0	-2	150	-2	*	AG	922	3.1	.0	10.0
I. De La VinEBL	*	-150	-2	0	0	*	AG	60	3.1	.0	10.0
J. De La VinWBA	*	150	0	0	0	*	AG	0	3.1	.0	10.0
K. De La VinWBD	*	0	0	-150	0	*	AG	0	3.1	.0	10.0
L. De La VinWBL	*	150	2	0	0	*	AG	0	3.1	.0	10.0
M. Pueblo StNBA	*	2	-750	2	-150	*	AG	190	3.1	.0	10.0
N. Pueblo StNBD	*	2	150	2	750	*	AG	166	3.1	.0	10.0
O. Pueblo StSBA	*	-2	750	-2	150	*	AG	81	3.1	.0	10.0
P. Pueblo StSBD	*	-2	-150	-2	-750	*	AG	133	3.1	.0	10.0
Q. De La VinEBA	*	-750	-2	-150	-2	*	AG	950	3.1	.0	10.0
R. De La VinEBD	*	150	-2	750	-2	*	AG	922	3.1	.0	10.0
S. De La VinWBA	*	750	0	150	0	*	AG	0	3.1	.0	10.0
T. De La VinWBD	*	-150	0	-750	0	*	AG	0	3.1	.0	10.0

JOB: Cottage Hospital
RUN: 2013wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-8	7	1.8
3. SW	*	-8	-8	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	276.	.5	.0	.0	.0	.0	.0	.0	.3	.0
2. NW	96.	.4	.0	.0	.0	.0	.0	.0	.0	.3
3. SW	84.	.5	.0	.0	.0	.0	.0	.0	.0	.4
4. NE	264.	.4	.0	.0	.0	.0	.0	.0	.3	.0
5. ES mdblk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	96.	.4	.0	.0	.0	.0	.0	.0	.3	.0
7. WS mdblk	84.	.5	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.3
9. SE mdblk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
17. SE blk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	*	2	-150	2	0	* AG	216	3.1	.0	10.0
B. Pueblo StNBD	*	2	0	2	150	* AG	215	3.1	.0	10.0
C. Pueblo StNBL	*	2	-150	0	0	* AG	118	3.1	.0	10.0
D. Pueblo StSBA	*	-2	150	-2	0	* AG	133	3.1	.0	10.0
E. Pueblo StSBD	*	-2	0	-2	-150	* AG	255	3.1	.0	10.0
F. Pueblo StSBL	*	-2	150	0	0	* AG	45	3.1	.0	10.0
G. Bath St.EBA	*	-150	-2	0	-2	* AG	131	3.1	.0	10.0
H. Bath St.EBD	*	0	-2	150	-2	* AG	150	3.1	.0	10.0
I. Bath St.EBL	*	-150	-2	0	0	* AG	37	3.1	.0	10.0
J. Bath St.WBA	*	150	2	0	2	* AG	266	3.1	.0	10.0
K. Bath St.WBD	*	0	2	-150	2	* AG	389	3.1	.0	10.0
L. Bath St.WBL	*	150	2	0	0	* AG	63	3.1	.0	10.0
M. Pueblo StNBA	*	2	-750	2	-150	* AG	334	3.1	.0	10.0
N. Pueblo StNBD	*	2	150	2	750	* AG	215	3.1	.0	10.0
O. Pueblo StSBA	*	-2	750	-2	150	* AG	178	3.1	.0	10.0
P. Pueblo StSBD	*	-2	-150	-2	-750	* AG	255	3.1	.0	10.0
Q. Bath St.EBAX	*	-750	-2	-150	-2	* AG	168	3.1	.0	10.0
R. Bath St.EBDX	*	150	-2	750	-2	* AG	150	3.1	.0	10.0
S. Bath St.WBAX	*	750	2	150	2	* AG	329	3.1	.0	10.0
T. Bath St.WBDX	*	-150	2	-750	2	* AG	389	3.1	.0	10.0

JOB: Cottage Hospital
RUN: 2013wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-8	8	1.8
3. SW	*	-8	-8	1.8
4. NE	*	8	8	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	8	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	8	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	8	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	8	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	174.	.4	.0	.0	.0	.0	.1	.0	.0	.0
3. SW	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	186.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.3	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.3	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.3	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	185.	.3	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.3	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	*	2	-150	2	0	*	AG	412	2.8	.0	10.0
B. Pueblo StNBD	*	2	0	2	150	*	AG	287	2.8	.0	10.0
C. Pueblo StNBL	*	2	-150	0	0	*	AG	0	2.8	.0	10.0
D. Pueblo StSBA	*	-2	150	-2	0	*	AG	129	2.8	.0	10.0
E. Pueblo StSBD	*	-2	0	-2	-150	*	AG	228	2.8	.0	10.0
F. Pueblo StSBL	*	-2	150	0	0	*	AG	121	2.8	.0	10.0
G. Castillo EBA	*	-150	0	0	0	*	AG	0	2.8	.0	10.0
H. Castillo EBD	*	0	0	150	0	*	AG	300	2.8	.0	10.0
I. Castillo EBL	*	-150	-2	0	0	*	AG	0	2.8	.0	10.0
J. Castillo WBA	*	150	0	0	0	*	AG	54	2.8	.0	10.0
K. Castillo WBD	*	0	0	-150	0	*	AG	0	2.8	.0	10.0
L. Castillo WBL	*	150	2	0	0	*	AG	99	2.8	.0	10.0
M. Pueblo StNBA	*	2	-750	2	-150	*	AG	412	2.8	.0	10.0
N. Pueblo StNBD	*	2	150	2	750	*	AG	287	2.8	.0	10.0
O. Pueblo StSBA	*	-2	750	-2	150	*	AG	250	2.8	.0	10.0
P. Pueblo StSBD	*	-2	-150	-2	-750	*	AG	228	2.8	.0	10.0
Q. Castillo EBA	*	-750	0	-150	0	*	AG	0	2.8	.0	10.0
R. Castillo EBD	*	150	0	750	0	*	AG	300	2.8	.0	10.0
S. Castillo WBA	*	750	0	150	0	*	AG	153	2.8	.0	10.0
T. Castillo WBD	*	-150	0	-750	0	*	AG	0	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-7	1.8
2. NW	*	-8	7	1.8
3. SW	*	-8	-7	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-7	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-7	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-7	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-7	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.3	.0	.1	.0	.0	.0	.0	.0	.0
2. NW	95.	.3	.0	.0	.0	.0	.0	.0	.0	.1
3. SW	85.	.3	.0	.0	.0	.0	.0	.0	.0	.1
4. NE	186.	.4	.2	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	279.	.2	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	91.	.1	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	89.	.1	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	.3	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	354.	.3	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.3	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	90.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.3	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Pueblo StNBA	*	2	-120	2	0	* AG	303	2.8	.0	10.0
B. Pueblo StNBD	*	2	0	2	150	* AG	364	2.8	.0	10.0
C. Pueblo StNBL	*	2	-120	0	0	* AG	52	2.8	.0	10.0
D. Pueblo StSBA	*	-2	120	-2	0	* AG	232	2.8	.0	10.0
E. Pueblo StSBD	*	-2	0	-2	-150	* AG	199	2.8	.0	10.0
F. Pueblo StSBL	*	-2	120	0	0	* AG	17	2.8	.0	10.0
G. Oak Park EBA	*	-120	-2	0	-2	* AG	23	2.8	.0	10.0
H. Oak Park EBD	*	0	-2	150	-2	* AG	73	2.8	.0	10.0
I. Oak Park EBL	*	-120	-2	0	0	* AG	98	2.8	.0	10.0
J. Oak Park WBA	*	120	2	0	2	* AG	19	2.8	.0	10.0
K. Oak Park WBD	*	0	2	-150	2	* AG	122	2.8	.0	10.0
L. Oak Park WBL	*	120	2	0	0	* AG	14	2.8	.0	10.0
M. Pueblo StNBA	*	2	-750	2	-150	* AG	355	2.8	.0	10.0
N. Pueblo StNBD	*	2	150	2	750	* AG	364	2.8	.0	10.0
O. Pueblo StSBA	*	-2	750	-2	150	* AG	249	2.8	.0	10.0
P. Pueblo StSBD	*	-2	-150	-2	-750	* AG	199	2.8	.0	10.0
Q. Oak Park EBA	*	-750	-2	-150	-2	* AG	121	2.8	.0	10.0
R. Oak Park EBD	*	150	-2	750	-2	* AG	73	2.8	.0	10.0
S. Oak Park WBA	*	750	2	150	2	* AG	33	2.8	.0	10.0
T. Oak Park WBD	*	-150	2	-750	2	* AG	122	2.8	.0	10.0

JOB: Cottage Hospital
RUN: 2013wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-8	8	1.8
3. SW	*	-8	-8	1.8
4. NE	*	8	8	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	8	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	8	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	8	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	8	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.3	.0	.1	.0	.0	.0	.0	.0	.0
2. NW	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	354.	.3	.0	.1	.0	.0	.0	.0	.0	.0
5. ES mdblk	273.	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	96.	.1	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.1	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	267.	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	5.	.3	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	186.	.3	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	274.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	266.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission SNBA	*	4	-150	4	0	*	AG	1099	3.1	.0	10.0
B. Mission SNBD	*	4	0	4	150	*	AG	780	3.1	.0	10.0
C. Mission SNBL	*	2	-150	0	0	*	AG	0	3.1	.0	10.0
D. Mission SSBA	*	-4	150	-4	0	*	AG	991	3.1	.0	10.0
E. Mission SSBD	*	-4	0	-4	-150	*	AG	1254	3.1	.0	10.0
F. Mission SSBL	*	-2	150	0	0	*	AG	85	3.1	.0	10.0
G. De La VinEBA	*	-150	-2	0	-2	*	AG	1075	3.1	.0	10.0
H. De La VinEBD	*	0	-2	150	-2	*	AG	1292	3.1	.0	10.0
I. De La VinEBL	*	-150	-2	0	0	*	AG	76	3.1	.0	10.0
J. De La VinWBA	*	150	0	0	0	*	AG	0	3.1	.0	10.0
K. De La VinWBD	*	0	0	-150	0	*	AG	0	3.1	.0	10.0
L. De La VinWBL	*	150	2	0	0	*	AG	0	3.1	.0	10.0
M. Mission SNBA	*	4	-750	4	-150	*	AG	1099	3.1	.0	10.0
N. Mission SNBD	*	4	150	4	750	*	AG	780	3.1	.0	10.0
O. Mission SSBA	*	-4	750	-4	150	*	AG	1076	3.1	.0	10.0
P. Mission SSBD	*	-4	-150	-4	-750	*	AG	1254	3.1	.0	10.0
Q. De La VinEBA	*	-750	-2	-150	-2	*	AG	1151	3.1	.0	10.0
R. De La VinEBD	*	150	-2	750	-2	*	AG	1292	3.1	.0	10.0
S. De La VinWBA	*	750	0	150	0	*	AG	0	3.1	.0	10.0
T. De La VinWBD	*	-150	0	-750	0	*	AG	0	3.1	.0	10.0

JOB: Cottage Hospital
RUN: 2013wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	10	-8	1.8
2. NW	*	-10	7	1.8
3. SW	*	-10	-8	1.8
4. NE	*	10	7	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	10	-150	1.8
10. NW mdblk	*	-10	150	1.8
11. SW mdblk	*	-10	-150	1.8
12. NE mdblk	*	10	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	10	-600	1.8
18. NW blk	*	-10	600	1.8
19. SW blk	*	-10	-600	1.8
20. NE blk	*	10	600	1.8

JOB: Cottage Hospital
RUN: 2013wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	1.0	.0	.3	.0	.2	.0	.0	.0	.3
2. NW	173.	1.1	.2	.0	.0	.0	.5	.0	.2	.0
3. SW	84.	1.0	.1	.0	.0	.0	.2	.0	.0	.5
4. NE	187.	1.1	.4	.0	.0	.0	.2	.0	.0	.2
5. ES mdblk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	96.	.6	.0	.0	.0	.0	.0	.0	.3	.0
7. WS mdblk	84.	.7	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.4
9. SE mdblk	353.	.9	.4	.0	.0	.0	.2	.0	.0	.0
10. NW mdblk	174.	.9	.0	.1	.0	.4	.0	.0	.0	.0
11. SW mdblk	7.	.9	.2	.0	.0	.0	.5	.0	.0	.0
12. NE mdblk	186.	.8	.0	.3	.0	.2	.0	.0	.0	.0
13. ES blk	276.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.8	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0
17. SE blk	*	.0	.0	.0	.0	.5	.0	.0	.3	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.5	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.3	.0	.0	.6	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.4	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission SNBA	*	0	-150	0	0	* AG	963	3.1	.0	10.0
B. Mission SNBD	*	0	0	0	150	* AG	1067	3.1	.0	10.0
C. Mission SNBL	*	2	-150	0	0	* AG	141	3.1	.0	10.0
D. Mission SSBA	*	-4	150	-4	0	* AG	1184	3.1	.0	10.0
E. Mission SSBD	*	-4	0	-4	-150	* AG	1644	3.1	.0	10.0
F. Mission SSBL	*	-2	150	0	0	* AG	0	3.1	.0	10.0
G. Bath St.EBA	*	-150	-5	0	-5	* AG	207	3.1	.0	10.0
H. Bath St.EBD	*	0	-5	150	-5	* AG	0	3.1	.0	10.0
I. Bath St.EBL	*	-150	-5	0	0	* AG	76	3.1	.0	10.0
J. Bath St.WBA	*	150	7	0	7	* AG	182	3.1	.0	10.0
K. Bath St.WBD	*	0	7	-150	7	* AG	351	3.1	.0	10.0
L. Bath St.WBL	*	150	5	0	0	* AG	309	3.1	.0	10.0
M. Mission SNBA	*	0	-750	0	-150	* AG	1104	3.1	.0	10.0
N. Mission SNBD	*	0	150	0	750	* AG	1067	3.1	.0	10.0
O. Mission SSBA	*	-4	750	-4	150	* AG	1184	3.1	.0	10.0
P. Mission SSBD	*	-4	-150	-4	-750	* AG	1644	3.1	.0	10.0
Q. Bath St.EBAX	*	-750	-5	-150	-5	* AG	283	3.1	.0	10.0
R. Bath St.EBDX	*	150	-5	750	-5	* AG	0	3.1	.0	10.0
S. Bath St.WBAX	*	750	7	150	7	* AG	491	3.1	.0	10.0
T. Bath St.WBDX	*	-150	7	-750	7	* AG	351	3.1	.0	10.0

JOB: Cottage Hospital
RUN: 2013wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	7	-12	1.8
2. NW	*	-10	14	1.8
3. SW	*	-10	-12	1.8
4. NE	*	7	14	1.8
5. ES mdblk	*	150	-12	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-12	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	7	-150	1.8
10. NW mdblk	*	-10	150	1.8
11. SW mdblk	*	-10	-150	1.8
12. NE mdblk	*	7	150	1.8
13. ES blk	*	600	-12	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-12	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	7	-600	1.8
18. NW blk	*	-10	600	1.8
19. SW blk	*	-10	-600	1.8
20. NE blk	*	7	600	1.8

JOB: Cottage Hospital
RUN: 2013wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	187.	1.1	.4	.0	.0	.0	.4	.0	.0	.0
2. NW	174.	1.2	.2	.0	.0	.0	.5	.0	.0	.0
3. SW	173.	1.1	.2	.0	.0	.0	.6	.0	.0	.0
4. NE	187.	1.1	.3	.0	.0	.0	.4	.0	.0	.0
5. ES mdblk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.4	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	353.	1.1	.4	.0	.0	.0	.4	.0	.0	.0
10. NW mdblk	174.	1.0	.0	.2	.0	.5	.0	.0	.0	.0
11. SW mdblk	7.	1.1	.2	.0	.0	.0	.6	.0	.0	.0
12. NE mdblk	186.	1.0	.0	.4	.0	.3	.0	.0	.0	.0
13. ES blk	277.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0
17. SE blk	*	.0	.0	.0	.0	.5	.0	.0	.5	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.3	.5	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.3	.0	.0	.7	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.5	.4	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cottage Hospital
RUN: 2013wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	15. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission SNBA	*	2	-150	2	0	*	AG	1374	3.1	.0	10.0
B. Mission SNBD	*	2	0	2	150	*	AG	1169	3.1	.0	10.0
C. Mission SNBL	*	2	-150	0	0	*	AG	118	3.1	.0	10.0
D. Mission SSBA	*	-2	150	-2	0	*	AG	1645	3.1	.0	10.0
E. Mission SSBD	*	-2	0	-2	-150	*	AG	1915	3.1	.0	10.0
F. Mission SSBL	*	-2	150	0	0	*	AG	42	3.1	.0	10.0
G. Castillo EBA	*	-150	-4	0	-4	*	AG	438	3.1	.0	10.0
H. Castillo EBD	*	0	-4	150	-4	*	AG	437	3.1	.0	10.0
I. Castillo EBL	*	-150	-2	0	0	*	AG	46	3.1	.0	10.0
J. Castillo WBA	*	150	0	0	0	*	AG	0	3.1	.0	10.0
K. Castillo WBD	*	0	0	-150	0	*	AG	142	3.1	.0	10.0
L. Castillo WBL	*	150	2	0	0	*	AG	0	3.1	.0	10.0
M. Mission SNBA	*	2	-750	2	-150	*	AG	1492	3.1	.0	10.0
N. Mission SNBD	*	2	150	2	750	*	AG	1169	3.1	.0	10.0
O. Mission SSBA	*	-2	750	-2	150	*	AG	1687	3.1	.0	10.0
P. Mission SSBD	*	-2	-150	-2	-750	*	AG	1915	3.1	.0	10.0
Q. Castillo EBA	*	-750	-4	-150	-4	*	AG	484	3.1	.0	10.0
R. Castillo EBD	*	150	-4	750	-4	*	AG	437	3.1	.0	10.0
S. Castillo WBA	*	750	0	150	0	*	AG	0	3.1	.0	10.0
T. Castillo WBD	*	-150	0	-750	0	*	AG	142	3.1	.0	10.0

JOB: Cottage Hospital
RUN: 2013wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-10	1.8
2. NW	*	-8	7	1.8
3. SW	*	-8	-10	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-10	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-10	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-10	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-10	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Cottage Hospital
RUN: 2013wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	187.	1.3	.5	.0	.0	.0	.4	.0	.0	.0
2. NW	173.	1.4	.3	.0	.0	.0	.7	.0	.0	.0
3. SW	173.	1.3	.3	.0	.0	.0	.7	.0	.0	.0
4. NE	187.	1.3	.5	.0	.0	.0	.4	.0	.0	.0
5. ES mdblk	275.	.4	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	98.	.4	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	83.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	265.	.3	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	353.	1.3	.5	.0	.0	.0	.4	.0	.0	.0
10. NW mdblk	174.	1.2	.0	.3	.0	.6	.0	.0	.0	.0
11. SW mdblk	7.	1.3	.3	.0	.0	.0	.7	.0	.0	.0
12. NE mdblk	186.	1.2	.0	.5	.0	.3	.0	.0	.0	.0
13. ES blk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.1	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Cottage Hospital
RUN: 2013wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
17. SE blk	*	.0	.0	.0	.0	.7	.0	.0	.5	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.4	.7	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.4	.0	.0	.8	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.5	.5	.0	.0	.0	.0	.0

HEALTH RISK ASSESSMENT: DIESEL EXHAUST PARTICULATE SCREENING

The following procedure uses the project construction emissions as an example and is based on Appendix I of the *Air Toxics Hot Spots Program Risk Assessment Guidelines* (Guidelines), Office of Environmental Health Hazard Assessment (OEHHA), August 2003. Analyses of other diesel exhaust particulate health impacts are performed in the same way. Part A analyzes carcinogenic health risk, and Part B analyzes chronic health risk. Diesel exhaust particulate does not have an acute health risk component.

A. Inhalation Cancer Health Risk Assessment

The following are the steps for calculating cancer risk at the maximum exposed individual resident (MEIR) using the high-end point-estimate for the inhalation exposure pathway.

Step 1: Determine the annual average concentration at the MEIR and inhalation cancer potency factor for each emitted compound.

The peak annual average concentration of diesel exhaust particulate at the nearest sensitive receptor was determined using the EPA's screening air dispersion model, TSCREEN3. Table 1 presents the annual average concentrations of diesel exhaust particulate from construction activities. As shown in the Air Quality section, the maximum PM_{10} emission rate from both construction equipment exhaust and fugitive emissions is 0.7 ton per year. The ratio of construction equipment exhaust to fugitive dust emissions ranges from 2 to 10 percent. For this analysis, it is assumed the maximum 10 percent of the total PM_{10} emission rate is from equipment exhaust. TSCREEN3 predicts a PM_{10} concentration of 0.096 µg/m^3 at the nearest sensitive receptor 150 feet from the hospital. In addition, Table 1 also presents inhalation cancer potency factors for diesel exhaust particulate, which can also be found in Chapter 7 and Appendix L of the Guidelines.

Table 1: Annual Average Concentrations at the MEIR and the Inhalation Cancer Potency Factor

Substance	Annual Average Concentrations (µg/m^3)	Inhalation Cancer Potency Factor $(mg/kg\text{-}d)^{-1}$
Diesel exhaust particulate	0.096	1.1

Step 2: Determine the inhalation dose.

The equation below is used to calculate the inhalation dose. This equation is listed in the *Air Toxics Hot Spots Risk Assessment Guidelines*; *Part IV; Exposure Assessment and Stochastic Analysis Technical Support Document (OEHHA, 2000b)* (Part IV TSD).

$$dose - inh = \frac{(Cair)(DBR)(A)(EF)(ED)(1x10^{-6})}{AT}$$

Where:

dose-inh	=	Dose through inhalation (mg/kg/d)
$1x10^{-6}$	=	Micrograms to milligrams conversion (10^{-3} mg/µg), liters to cubic meters conversion (10^{-3} m^3/l)
Cair	=	Concentration in air (µg/m^3)
DBR	=	Daily breathing rate (L/kg body weight-day or L/kg-day)
A	=	Inhalation absorption factor
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
AT	=	Averaging time period over which exposure is averaged, in days (e.g., 25,550 days for 70 year cancer risk)

A summary of the exposure point-estimates and data distributions for use in risk assessment can be found in Chapter 5 of the Guidelines. For more detail on point-estimates and data distributions, see the Part IV TSD. The recommended default values presented in Table 2 can be used when site-specific information is not available.

Table 2: Recommended Default Values

Variable	Recommended Default Value
EF	350 days/year
ED	9; 30; or 70 years
AT	70 years (25,550 days)
DBR (used in this example) 9 year-exposure	452 (mean); 581 (95th percentile) L/kg body weight – day (For other DBRs see Table 5.4, Chapter 5)
A	1 (currently used for all substances included in the Hot Spots program)

The following equation shows the calculation for the inhalation dose of diesel exhaust particulate by using the annual average concentration (Table 1) and the recommended default values in Table 2. Note that the high-end (95th percentile) 9-year daily breathing rate of 581 liters/kg-day was used in this example.

$$(dose-inh)_{\substack{\text{(diesel}\\ \text{exhaust}\\ \text{particulate)}}} = \frac{\left(\frac{0.096\mu g}{m^3}\right)\left(\frac{581\ \text{liters}}{\text{kg - day}}\right)(1)\left(\frac{350\,\text{days}}{\text{year}}\right)(9\ years)\left(\frac{1x10^{-3}mg}{1\mu g}\right)\left(\frac{1x10^{-3}m^3}{\text{liters}}\right)}{25{,}550\ days}$$

$$(dose-inh)_{\substack{\text{(diesel}\\ \text{exhaust}\\ \text{particulate)}}} = 6.9x10^{-6}\ \text{mg/kg - day}$$

Step 3: Determine potential inhalation cancer risk for the MEIR.

The dose is multiplied by the inhalation cancer potency factor as shown below. A factor of $1x10^6$ is used to express cancer risk in chances per million.

$$\left(Inhalation\ Dose\frac{mg}{kg-day}\right)\left(Cancer\ Potency\frac{kg-day}{mg}\right)\left(1x10^6\right)=\text{Cancer Risk (chances per million)}$$

The equation below shows the calculation for the inhalation cancer risk. The inhalation cancer potency factor for diesel exhaust particulate is 1.1 $(mg/kg\text{-}day)^{-1}$ taken from Table 1.

$$\left(6.9x10^{-6}\frac{mg}{kg-day}\right)\left(1.1\frac{kg-day}{mg}\right)\left(1x10^6\right)=7.6\text{ chances per million}$$

Even with all the conservative assumptions in this analysis, construction activities pose a (inhalation) cancer risk of 7.6 chances per million at the MEIR. The threshold for carcinogenic health risks is 10 in a million; therefore, the construction-related emissions of diesel exhaust particulate will not create a significant carcinogenic health risk.

B. Calculation of Noncancer Chronic Hazard Indices

Both a noncancer chronic HQ and HI are calculated at the MEIR. An HQ expresses the noncancer health impacts for an individual substance, and an HI expresses the potential impacts for multiple substances. No exposure duration adjustment (e.g., 9/70) should be made for noncancer assessments. Specific requirements for risk assessment under the Hot Spots Program can be found in the Guidelines, Chapters 8 and 9.

Step 1: Determine the annual average concentration at the MEIR and inhalation and oral chronic RELs for each emitted substance.

Table 3 presents the annual average concentration, target organ systems, and chronic REL for diesel exhaust particulate. Diesel exhaust particulate is not a multipathway substance; therefore, respiratory exposure is the only pathway to potential exposure. All chronic RELs and their corresponding target organ system(s) can be found in Tables 6.2 and 6.3 (the Guidelines, Chapter 6) and in Appendix L of the Guidelines.

Table 3: Annual Average Concentration, Chronic REL, and Target Organ Systems for Substances at the MEIR

Substance	Annual Average Conc. ($\mu g/m^3$)	Chronic REL (inhalation) ($\mu g/m^3$)	Target Organ System(s) (inhalation)	Chronic Oral REL (mg/kg-day)	Target Organ System(s) (oral/dermal)
Diesel Exhaust Particulate	0.096	5	Respiratory System	-	-

Step 2: Determine the inhalation chronic hazard quotient.

For inhalation exposure, the hazard quotient is calculated by taking the annual average concentration and dividing by the corresponding chronic inhalation REL. Using the information contained in Table 3, the equation below is used to calculate the inhalation hazard quotient for diesel exhaust particulate.

$$\begin{pmatrix}\text{Chronic}\\ \text{Hazard}\\ \text{Quotient}\end{pmatrix} = \frac{\begin{pmatrix}\textit{Annual avg.}\\ \textit{concentration}\end{pmatrix}}{\begin{pmatrix}\textit{Chronic}\\ \textit{REL}\end{pmatrix}} \Rightarrow \begin{pmatrix}\text{Chronic}\\ \text{Hazard}\\ \text{Quotient}\end{pmatrix}_{\text{(diesel exhaust part.)}} = \frac{\left(0.096\ \mu\text{g/m}^3\right)}{\left(5.0\ \mu g/m^3\right)} = 0.02$$

Step 3: Determine the chronic HI.

The chronic HI is calculated by summing the hazard quotients (inhalation and noninhalation) for each substance by the target organ system(s). In this case, the HI equals the HQ because only one substance is being analyzed.

Table 4: Substance-Specific Inhalation and Noninhalation Hazard Quotients and the Hazard Index by Target Organ System

Substance	Respiratory System	Hematopoietic System	Alimentary System	Endocrine System	Development	Reproductive System	Kidney	Nervous System	Cardiovascular System	Skin
Diesel Exhaust Particulate	0.02	-	-	-	-	-	-	-	-	-
Hazard Index	**0.02**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

i = inhalation pathway contribution
ni = noninhalation pathway contribution

Table 4 shows individual hazard quotients (diesel exhaust particulate affects only the respiratory system pathway) for diesel exhaust particulate and the hazard index by target organ system.

Exceeding the hazard index threshold of one may indicate that there is the potential for adverse chronic health impacts at a receptor location. Therefore, there is increased concern that exposed individuals may experience respiratory system irritation or injury, particularly sensitive individuals.

The District and OEHHA should be consulted when a hazard index exceeds one (see Section 8.3 of the Guidelines). In this example, the HQ (and HI) of one was not equaled or exceeded. Therefore, the construction-related emissions of diesel exhaust particulate will not create a significant chronic health risk.